BookletChart™

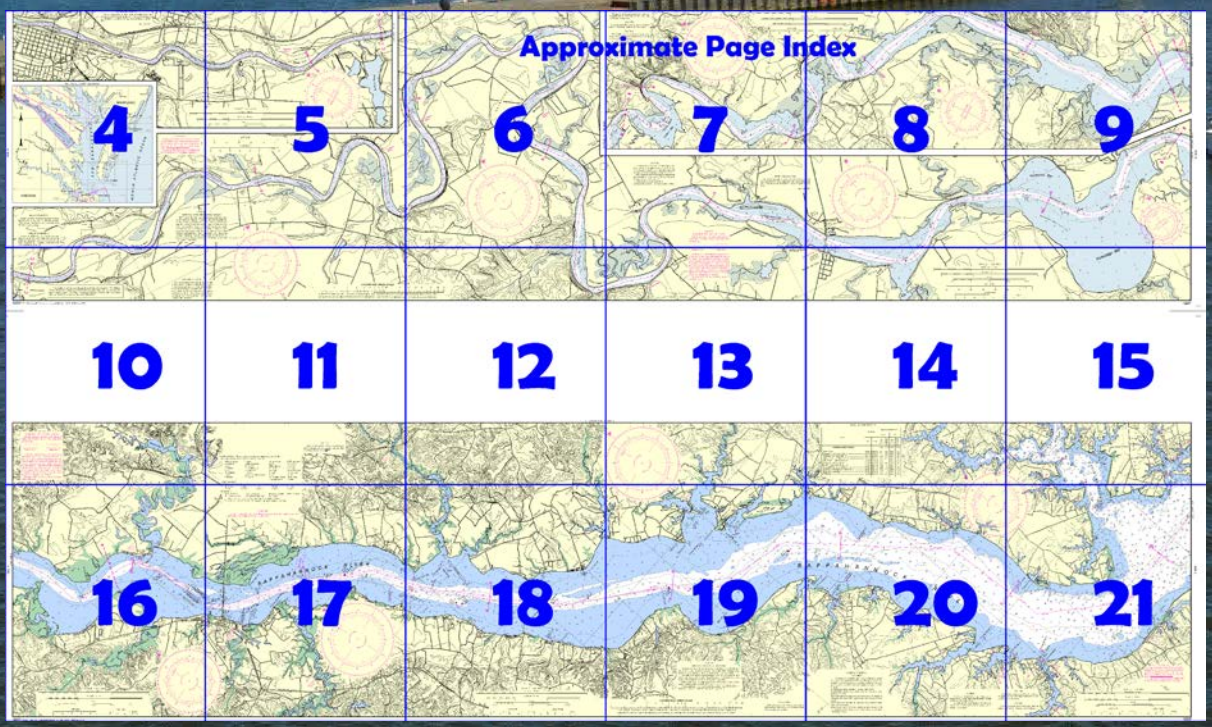
Rappahannock River – Corrotoman River to Fredericksburg, VA

NOAA Chart 12237

A reduced-scale NOAA nautical chart for small boaters

When possible, use the full-size NOAA chart for navigation.

- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



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National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=12237.

(Selected Excerpts from Coast Pilot)
Rappahannock River flows into the west side of Chesapeake Bay 45.7 miles by channel from the Virginia Capes. Fredericksburg, 93 miles above the mouth, is the head of practical navigation.
Traffic on the river consists chiefly of pulpwood, shellfish and shells, chemicals, and some sand and gravel. Drafts of vessels using the river seldom exceed 11 feet and are mostly 6 feet or less.
Mileages on Rappahannock River, such as Mile 15N and Mile 32W, are the nautical miles above the midchannel point on a line drawn from Stingray Point to Windmill Point. The letters N, S, E, or W following the numbers denote by compass points the side of the river where each feature is located.
The river has natural depths of 15 feet or more to the bridge at Tappahannock, 37.4 miles above the mouth. Above this point, a Federal project provides for dredging of the bars to provide a channel 12 feet deep to Fredericksburg. In 1955-1977, the controlling depths were 8.5 feet from the bridge at Tappahannock to the bridge at Port Royal, Mile 68.3, thence 9 feet to the Fredericksburg Bar, Mile 93.0, thence 6.5 feet to Steamboat Wharf and 4 feet to the Standard Oil Co. Wharf, Miles 93.1 and 93.2, respectively, at Fredericksburg.
In general, vessels can anchor anywhere near the channel of the Rappahannock River where the bottom is soft and the depth suitable. Deep-draft vessels will find good anchorage 3 to 5 miles from the mouth. Carter and Urbanna Creeks are used extensively as harbors by small craft.
The channel from the mouth of Rappahannock River to Tappahannock is comparatively straight, but gradually decreases in width and leads between shoals that make out from both banks. The principal dangers are marked. Strangers can take a draft of 10 feet to Tappahannock by day with the aid of the chart, but navigation of the narrow, crooked channel farther up requires local knowledge. There are rocks in places on both sides of the channel for 4 miles below Fredericksburg, and the shores should be given a good berth. Strangers can safely carry a draft of 5 feet to Fredericksburg with the aid of the chart.
Currents.–The **currents** follow the general direction of the channel. The velocities throughout the river are usually weak, averaging less than 1 knot at the entrance to 1.4 knots at Tappahannock. Times of slack water and strength of current become later going upriver. These normal conditions are subject to change by winds and changes in drainage flow.
Ice.–During severe winters, **ice** closes the river nearly to Tappahannock, but in ordinary winters the channels are usually kept open by the river traffic. Ice sufficient to interfere with navigation of small craft will usually be encountered in January and February, particularly above Port Royal.
Supplies and Repairs.–The principal places along Rappahannock River for supplies and small-vessel **repairs** are Broad Creek, Carter Creek, and Urbanna Creek.
The entrance to Rappahannock River is between Stingray Point and **Windmill Point,** 45.7 miles above the Capes. This is the **Mile 0.0** for distances on the Rappahannock. The shores on both sides of the entrance are wooded; the two lights, off Stingray and Windmill Points, are the most prominent landmarks.
Rappahannock Spit extends southeastward from Windmill Point for about 4.5 miles, and has depths of 4 to 18 feet. **Windmill Point Light** (37°35'49"N., 76°14'10"W.), 34 feet above the water, is shown from a platform with a red and white diamond-shaped daymark, in depths of 12 feet on the spit 2.3 miles from the point.
Depths of 10 feet can be carried across Rappahannock Spit anywhere outside Windmill Point Light. About 0.4 mile outside the light, a buoyed lane that extends southwestward through the fishtraps is a short cut for lightdraft vessels approaching the river from northward.

U.S. Coast Guard Rescue Coordination Center
24 hour Regional Contact for Emergencies

RCC Norfolk	Commander 5th CG District Norfolk, VA	(575) 398-6231

Table of Selected Chart Notes

HEIGHTS

Heights in feet above Mean High Water.

DISTANCES

Mileage distances from the mouth of the Rhappahannock River, between Stingray Point and Windmill Point are in International Nautical Miles, and are indicated thus: ——●——

Courses are TRUE and must be CORRECTED for any variation and compass deviation.

DISTANCES

Mileage distances from the mouth of the Rhappahannock River, between Stingray Point and Windmill Point are in International Nautical Miles, and are indicated thus: ——●——

Courses are TRUE and must be CORRECTED for any variation and compass deviation.

All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

CAUTION

Small craft should stay clear of large commercial and government vessels even if small craft have the right-of-way.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

CAUTION

Small craft should stay clear of large commercial and government vessels even if small craft have the right-of-way.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus: ⊛

All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area *Cable Area*

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

SUBMARINE PIPELINES AND CABLES

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Covered wells may be marked by lighted or unlighted buoys.

CABLE FERRY

Cable across the river may be at or near the water surface. Mariners should exercise caution when navigating in this area.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.477" northward and 1.115" eastward to agree with this chart.

RAPPAHANNOCK RIVER

The controlling depth at mean lower low water across the bars between Port Royal Bridge and the Fredericksburg Bar was 10 feet for a width of 100 feet, thence 6 feet to Old City Dock.

Apr - Jun 1977

RAPPAHANNOCK RIVER

The controlling depth at mean lower low water across the bars between Port Royal Bridge and the Fredericksburg Bar was 10 feet for a width of 100 feet, thence 6 feet to Old City Dock.

Apr - Jun 1977

CAUTION

WARNINGS CONCERNING LARGE VESSELS

The "Rules of the Road" state that recreational boats shall not impede the passage of a vessel that can navigate only within a narrow channel or fairway. Large vessels may appear to move slowly due to their large size but actually transit at speeds in excess of 12 knots, requiring a great distance in which to maneuver or stop. A large vessel's superstructure may block the wind with the result that sailboats and sailboards may unexpectedly find themselves unable to maneuver. Bow and stern waves can be hazardous to small vessels. Large vessels may not be able to see small craft close to their bows.

ABBREVIATIONS

(For complete list of Symbols and Abbreviations, see Chart No. 1)

RULES OF THE ROAD

(ABRIDGED)

Motorless craft have the right-of-way in almost all cases.
Sailing vessels and motorboats less than sixty-five feet in length shall not hamper, in a narrow channel, the safe passage of a vessel which can navigate only inside that channel.
A motorboat being overtaken has the right-of-way.
Motorboats approaching head to head or nearly so should pass port to port.
When motorboats approach each other at right angles or obliquely, the boat on the right has the right-of-way in most cases.
Motorboats must keep to the right in narrow channels when safe and practicable.
Mariners are urged to become familiar with the complete text of the Rules of the Road in U.S. Coast Guard publication "Navigation Rules."

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: ——— — ——— —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

FACILITIES

Locations of public marine facilities are shown by large magenta numbers with leaders and refer to the facility tabulation.

PUBLIC BOATING INSTRUCTION PROGRAMS

The United States Power Squadrons (USPS) and U.S. Coast Guard Auxiliary (USCGAUX), national organizations of boatmen, conduct extensive boating instruction programs in communities throughout the United States. For information regarding these educational courses, contact the following sources:

USPS - Local Squadron Commander or USPS Headquarters, Post Office Box 30423, Raleigh, N.C. 27612, 919-821-0281.

USCGAUX-5th Coast Guard District, Federal Building, 431 Crawford St., Portsmouth, VA 23704-5004, Tel. 804-398-6208 or USCG Headquarters (G-BAU), Washington, D.C. 20593-0001.

TIDAL CURRENT DATA

PLACE	POSITION		MAXIMUM CURRENTS			
			Flood		Ebb	
	Lat.	Long.	Direction (true)	Average velocity	Direction (true)	Average velocity
RAPPAHANNOCK RIVER			*deg.*	*knots*	*deg.*	*knots*
Towles Point	37°38'N	76°30'W	274	0.6	103	0.5
Rogue Point, 0.8 mile WNW. of	37°40'N	76°33'W	0	0.6	195	0.6
Waterview, 1.3 miles NNE. of	37°45'N	76°36'W	340	0.7	155	0.6
Tarpley Point, 1.5 miles south of	37°46'N	76°39'W	300	0.7	105	0.7
Jones Point, 1.4 miles NNW. of	37°48'N	76°42'W	315	1.1	105	0.9
Sharps, 1.2 miles south of	37°48'N	76°42'W	290	0.9	95	0.8
Bowlers Rock, 0.2 mile north of	37°50'N	76°44'W	315	1.0	135	1.1
Accaceek Point, 0.3 mile SW. of	37°53'N	76°47'W	335	1.2	150	1.0
Tappahannock Bridge, 1.8 miles SE. of	37°55'N	76°49'W	315	1.4	105	1.3
Tappahannock Bridge	37°56'N	76°51'W	315	1.3	135	1.2
Port Royal	38°10'N	77°11'W	310	0.7	130	0.7

(603)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical
Al alternating
B black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
G green
IQ interrupted quick
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mkr marker
Mo morse code
N nun
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
R TR radio tower
Rot rotating
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow

Bottom characteristics:

Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky

Miscellaneous:

AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged

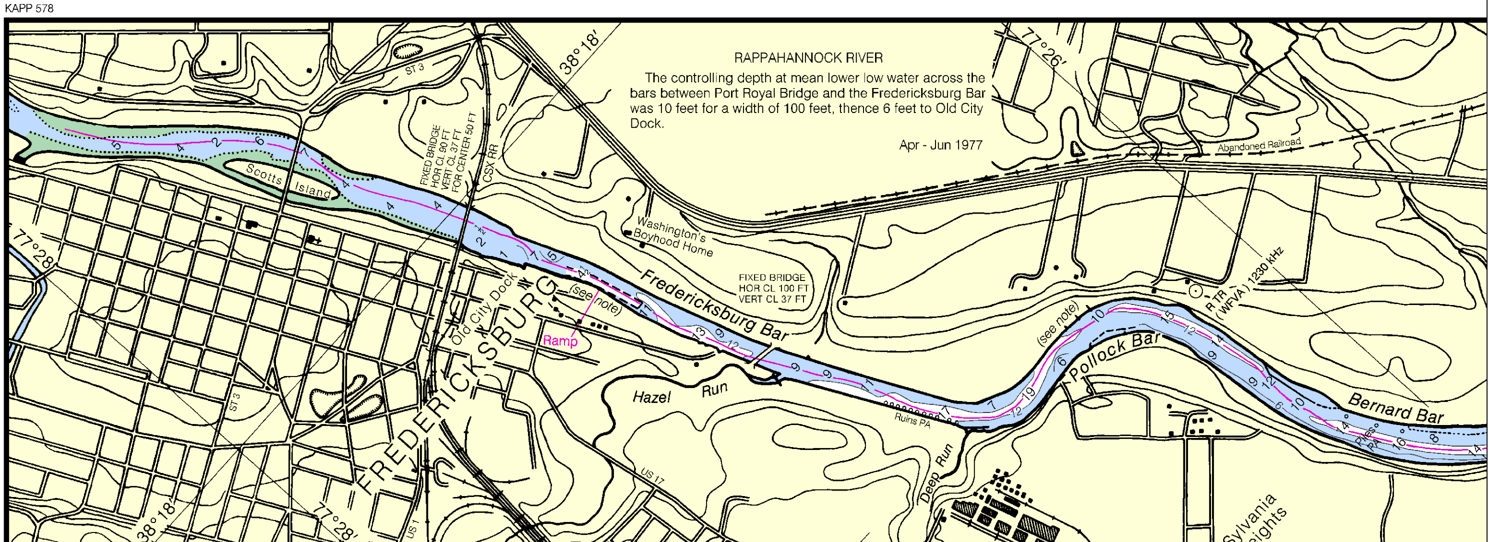
(21) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

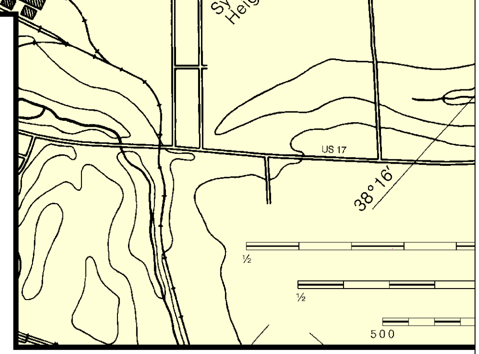
(58)

NO	LOCATION	DEPTH: APPROACH-FEET(REPORTED)	DEPTH: ALONGSIDE-FEET(REPORTED)	SERVICES: ELECTRICITY-MOORINGS-BERTHS (TRANSIENTS)	RAMP SURFACED-NATURAL	REPAIRS HULL-MOTOR-RADIO	MARINE RAILWAY-FEET	LIFT CAPACITY-TONS	BOAT RENTAL: CANOE-ROW-MOTOR	BOAT RENTAL: CHARTER-HOUSE-SAIL	FOOD-LODGING-CAMPING	TOILETS-SHOWERS-LAUNDRY / PUMP-OUT STATION	WINTER STORAGE WET-DRY	NAUTICAL CHART SALES	SUPPLIES: WATER-ICE	GROCERIES-HARDWARE	BAIT-TACKLE	DIESEL OIL-GASOLINE
1	IRVINGTON MARINA INC	10	10	B E		HMR		25				TS P	WD		WI	H		DG
4A	RAPPAHANNOCK YACHTS	9	9	B E		HM		30				TS P			W	H		
5	THE TIDES MARINA	7	7	B E				30	CRM	S	FL	TSLP			WI	GH		DG
5A	CUSTOM YACHT SERVICE	11	11			HM	64	50				T	D			H		
9A	YANKEE PT SAIL MAR	8	8	B E	SN	HMR		40	C	S	F C	TS P	WD	C	WI	H		DG
10	URBANNA HARBOUR	7	7	M								TS P	W					
11	URBANNA YACHT CNTR	10	10	B E	S	HM		25			FL	TSLP	WD		WI	G		DG
11A	URBANNA BRIDGE	7	7	B E								TS P	W		WI		BT	
12	PORT URBANNA YCHT CTR	12	8	B E		HMR		40			FL	TS L P	WD		WI	GH	BT	DG
12C	UPTON POINT MARINA	12	12	B E							FL	TSL	W		W			
13	BURRELL'S MARINA	6	6	E	SN	H					F	TS P			WI		BT	
14	REMLIK MARINA	4	4	B E		HM	42	40	M	C		TS P	WD	C	WI	H	BT	DG
15	CONRAD 'S SEAFOOD	6	5		S						F	T			WI		BT	
16	GREENVALE CREEK MAR	8	5	BME	S	HMR	45	18			F	TSLP	WD	C	WI	GH	BT	
21	GARRETT'S MARINA	5	5	B E	S	HM		15	M		F	TS P	D	C	WI	H	BT	G
22	SOUTHSIDE MOTEL & MAR	8	4	B	S						L	TS			WI	GH	BT	
23	JUNE PARKER MARINA	4	4		S	M		6			FL	TS	WD	C	WI	G	BT	DG

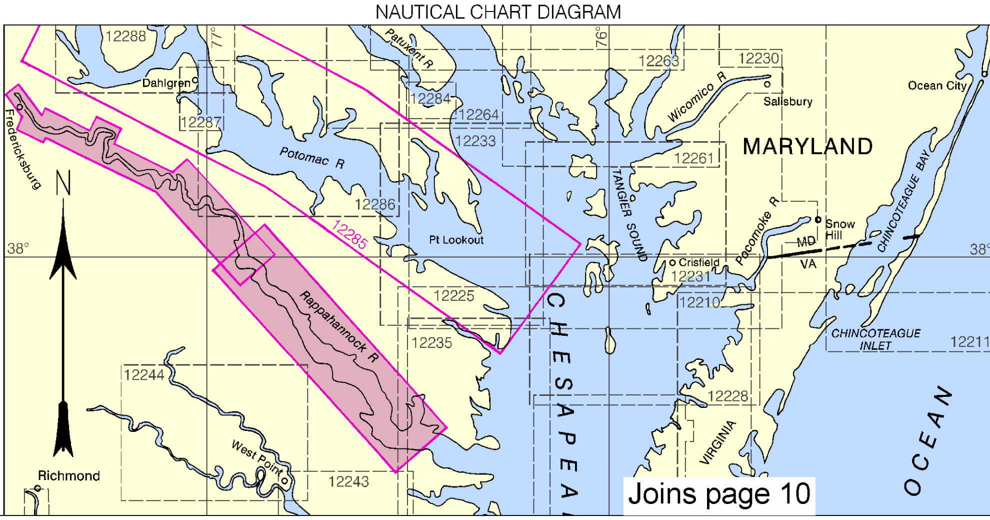
THE LOCATIONS OF THE ABOVE PUBLIC MARINE FACILITIES ARE SHOWN ON THE CHART BY LARGE MAGENTA NUMBERS.
THE TABULATED "APPROACH-FEET(REPORTED)" IS THE DEPTH AVAILABLE FROM THE NEAREST NATURAL OR DREDGED CHANNEL TO THE FACILITY.
THE TABULATED "PUMP-OUT STATION" IS DEFINED AS FACILITIES AVAILABLE FOR PUMPING OUT BOAT HOLDING TANKS.

KAPP 578





NAUTICAL CHART DIAGRAM



Joins page 10

DISTANCES
Mileage distances from the mouth of the Rhappahannock River, between Stingray Point and Windmill Point are in International Nautical Miles, and are indicated thus:
Courses are TRUE and must be CORRECTED for any variation and compass deviation.

Printed at reduced scale.

SCALE 1:40,000

Nautical Miles

1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Note: Chart grid lines are aligned with true north.

HAMPTON ROADS (Sewalls Pt.), VA.

Predicted times and heights of high and low water-Eastern Standard Time. For Daylight Saving time, add 1 hour.
To predict local tide, apply the time difference listed in the facility tabulations to these tide predictions.

AUGUST 2003

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0506	0.9	16	0538	0.2
F	1111	3.0	Sa	1239	3.7
	1720	0.1		1808	0.4
	2328	2.8			
2	0547	0.9	17	0010	2.5
Sa	1159	2.9	Su	0616	0.3
	1812	0.2		1231	3.7
				1855	0.6
3	0015	2.7	18	0051	2.3
Su	0632	0.9	M	0656	0.4
	1249	2.9		1315	3.6
	1908	0.2		1944	0.7
4	0106	2.6	19	0135	2.2
M	0720	0.1	Tu	0739	0.6
	1344	2.9		1404	3.6
	2009	0.3		2038	0.8
5	0202	2.4	20	0225	2.1
Tu	0814	0.1	W	0828	0.6
	1444	3.0		1458	3.5
	2114	0.3		2136	0.8
6	0304	2.3	21	0321	2.1
W	0913	0.1	Th	0922	0.6
	1549	3.0		1556	3.5
	2221	0.3		2236	0.8
7	0410	2.3	22	0421	2.1
Th	1015	0.2	F	1020	0.6
	1654	3.0		1656	3.5
	2326	0.3		2333	0.7
8	0517	2.3	23	0619	2.1
F	1120	0.1	Sa	1117	0.6
	1758	3.1		1751	2.7
9	0027	0.2	24	0024	0.6
Sa	0620	2.4	Su	0614	2.2
	1222	0.1		1212	0.5
	1857	3.1		1841	2.8
10	0122	0.2	25	0110	0.5
Su	0717	2.5	M	0703	2.4
	1320	0.0		1303	0.4
	1951	3.2		1927	2.9
11	0212	0.1	26	0153	0.3
M	0810	2.6	Tu	0749	2.6
	1414	0.0		1351	0.2
	2041	3.2		2011	3.0
12	0258	0.1	27	0234	0.2
Tu	0859	2.7	W	0834	2.8
	1505	0.0		1439	0.1
	2127	3.1		2054	3.1
13	0341	0.0	28	0314	0.1
W	0944	2.7	Th	0917	2.9
	1552	0.1		1526	0.1
	2210	3.0		2137	3.1
14	0422	0.1	29	0354	0.0
Th	1027	2.8	F	1002	3.1
	1638	0.2		1614	0.1
	2251	2.8		2221	3.0
15	0500	0.3	30	0435	0.0
F	1109	2.8	Sa	1049	3.2
	1723	0.3		1704	0.1
	2331	2.7		2307	2.9
			31	0519	0.0
			Su	1136	3.2
				1757	0.2
				2355	2.8

SEPTEMBER 2003

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0605	0.1	16	0008	2.4
M	1228	3.2	Tu	0610	0.6
	1854	0.3		1229	2.7
				1902	0.8
2	0048	2.8	17	0050	2.3
Tu	0657	0.2	W	0653	0.7
	1326	3.1		1316	2.7
	1955	0.4		1954	0.9
3	0147	2.5	18	0139	2.2
W	0754	0.3	Th	0742	0.7
	1429	3.1		1410	2.6
	2101	0.5		2053	0.8
4	0252	2.4	19	0236	2.1
Th	0853	0.3	F	0839	0.8
	1538	3.0		1511	2.6
	2209	0.5		2154	0.9
5	0409	2.4	20	0340	2.1
F	1007	0.4	Sa	0942	0.8
	1648	3.0		1614	2.6
	2314	0.5		2253	0.9
6	0510	2.4	21	0443	2.2
Sa	1114	0.4	Su	1044	0.7
	1750	3.1		1713	2.7
				2345	0.7
7	0013	0.4	22	0540	2.4
Su	0612	2.5	M	1143	0.5
	1217	0.3		1806	2.9
	1847	3.1			
8	0104	0.3	23	0032	0.6
M	0705	2.7	Tu	0631	2.6
	1312	0.2		1237	0.4
	1937	3.1		1855	3.0
9	0150	0.2	24	0115	0.3
Tu	0754	2.8	W	0719	2.9
	1402	0.1		1328	0.2
	2022	3.1		1941	3.1
10	0232	0.2	25	0157	0.1
W	0838	2.9	Th	0805	3.1
	1448	0.2		1418	0.1
	2103	3.0		2027	3.1
11	0310	0.2	26	0239	0.0
Th	0918	3.0	F	0850	3.3
	1532	0.2		1507	0.0
	2141	2.9		2112	3.1
12	0348	0.2	27	0322	-0.1
F	0958	3.0	Sa	0937	3.4
	1613	0.3		1557	0.0
	2218	2.8		2158	0.0
13	0422	0.3	28	0406	-0.1
Sa	1033	3.0	Su	1025	3.5
	1653	0.4		1648	0.0
	2254	2.7		2246	2.9
14	0456	0.4	29	0452	0.0
Su	1110	2.9	M	1115	3.5
	1734	0.5		1742	0.1
	2330	2.5		2337	2.8
15	0532	0.5	30	0542	0.1
M	1148	2.8	Tu	1210	3.4
	1816	0.7		1839	0.3

OCTOBER 2003

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0032	2.6	16	0014	2.2
W	0638	0.3	Th	0614	0.7
	1310	3.2		1237	2.7
	1942	0.4		1917	0.8
2	0134	2.5	17	0102	2.1
Th	0740	0.4	F	0703	0.7
	1416	3.1		1329	2.8
	2048	0.6		2013	0.8
3	0243	2.4	18	0159	2.1
F	0849	0.5	Sa	0801	0.8
	1527	3.0		1429	2.8
	2155	0.8		2112	0.8
4	0354	2.4	19	0303	2.2
Sa	1000	0.5	Su	0836	0.7
	1635	2.9		1531	2.8
	2257	0.8		2209	0.7
5	0501	2.5	20	0406	2.3
Su	1107	0.5	M	1012	0.6
	1736	2.9		1632	2.7
	2352	0.8		2302	0.5
6	0600	2.6	21	0505	2.5
M	1207	0.4	Tu	1114	0.5
	1829	2.9		1729	2.8
				2350	0.3
7	0040	0.3	22	0558	2.8
Tu	0650	2.8	W	1211	0.3
	1300	0.3		1821	2.9
	1918	2.9			
8	0122	0.3	23	0036	0.1
W	0734	2.9	Th	0649	3.1
	1347	0.3		1309	0.1
	1957	2.9		1911	2.9
9	0200	0.2	24	0121	0.0
Th	0813	3.0	F	0737	3.3
	1432	0.2		1357	0.0
	2038	2.8		1959	3.0
10	0236	0.2	25	0207	-0.1
F	0850	3.1	Sa	0825	3.5
	1509	0.1		1448	-0.1
	2112	2.8		2048	2.9
11	0311	0.3	26	0253	-0.2
Sa	0926	3.1	Su	0914	3.6
	1548	0.3		1540	-0.1
	2147	2.7		2136	2.9
12	0345	0.3	27	0340	-0.2
Su	1000	3.0	M	1005	3.6
	1626	0.4		1632	-0.1
	2221	2.6		2227	2.8
13	0419	0.4	28	0430	-0.1
M	1036	3.0	Tu	1058	3.5
	1704	0.5		1726	0.0
	2256	2.4		2320	2.8
14	0455	0.5	29	0524	0.0
Tu	1112	2.8	W	1154	3.3
	1744	0.6		1824	0.2
	2333	2.3			
15	0532	0.6	30	0617	0.2
W	1152	2.6	Th	0622	0.2
	1828	0.7		1255	3.1
				1925	0.3
			31	0121	2.4
			F	0726	0.3
				1400	2.9
				2029	0.4

NOVEMBER 2003

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0229	2.4	16	0128	2.1
Sa	0836	0.5	Su	0750	0.8
	1508	2.6		1351	2.5
	2132	0.4		2030	0.5
2	0339	2.4	17	0229	2.1
Su	0947	0.5	M	0924	0.5
	1613	2.7		1451	2.4
	2230	0.4		2124	0.4
3	0443	2.5	18	0330	2.3
M	1053	0.4	Tu	0941	0.5
	1712	2.7		1552	2.5
	2322	0.3		2217	0.3
4	0538	2.6	19	0430	2.5
Tu	1151	0.4	W	1048	0.3
	1803	2.6		1651	2.5
				2309	0.1
5	0007	0.3	20	0526	2.8
W	0626	2.7	Th	1147	0.1
	1242	0.3		1748	2.6
	1846	2.6		2359	-0.1
6	0048	0.2	21	0620	3.0
Th	0708	2.8	F	1244	-0.1
	1327	0.3		1842	2.6
	1929	2.6			
7	0126	0.2	22	0049	-0.2
F	0747	2.9	Sa	0713	3.3
	1408	0.2		1338	0.2
	2007	2.5		1934	2.6
8	0203	0.2	23	0139	-0.3
Sa	0823	2.9	Su	0804	3.4
	1447	0.2		1431	-0.3
	2043	2.5		2026	2.6
9	0238	0.2	24	0229	-0.4
Su	0856	2.9	M	0856	3.5
	1524	0.2		1522	-0.3
	2118	2.4		2118	2.6
10	0314	0.2	25	0320	-0.4
M	0933	2.9	Tu	0949	3.4
	1602	0.3		1617	-0.3
	2153	2.3		2210	2.6
11	0349	0.3	26	0413	-0.3
Tu	1009	2.8	W	1043	3.3
	1640	0.4		1711	-0.2
	2229	2.3		2304	2.5
12	0425	0.3	27	0508	-0.2
W	1045	2.8	Th	1139	3.1
	1716	0.4		1806	-0.1
	2306	2.2			
13	0503	0.4	28	0002	2.4
Th	1124	2.7	F	0607	0.0
	1751	0.5		1257	2.9
	2346	2.1		1903	0.1
14	0545	0.5	29	0103	2.3
F	1207	2.6	Sa	0709	0.1
	1847	0.5		1337	2.7
				2000	0.1
15	0635	0.6	30	0207	2.3
Sa	0834	0.5	Su	0815	0.3
	1256	2.5		1439	2.5
	1937	0.5		2057	0.2

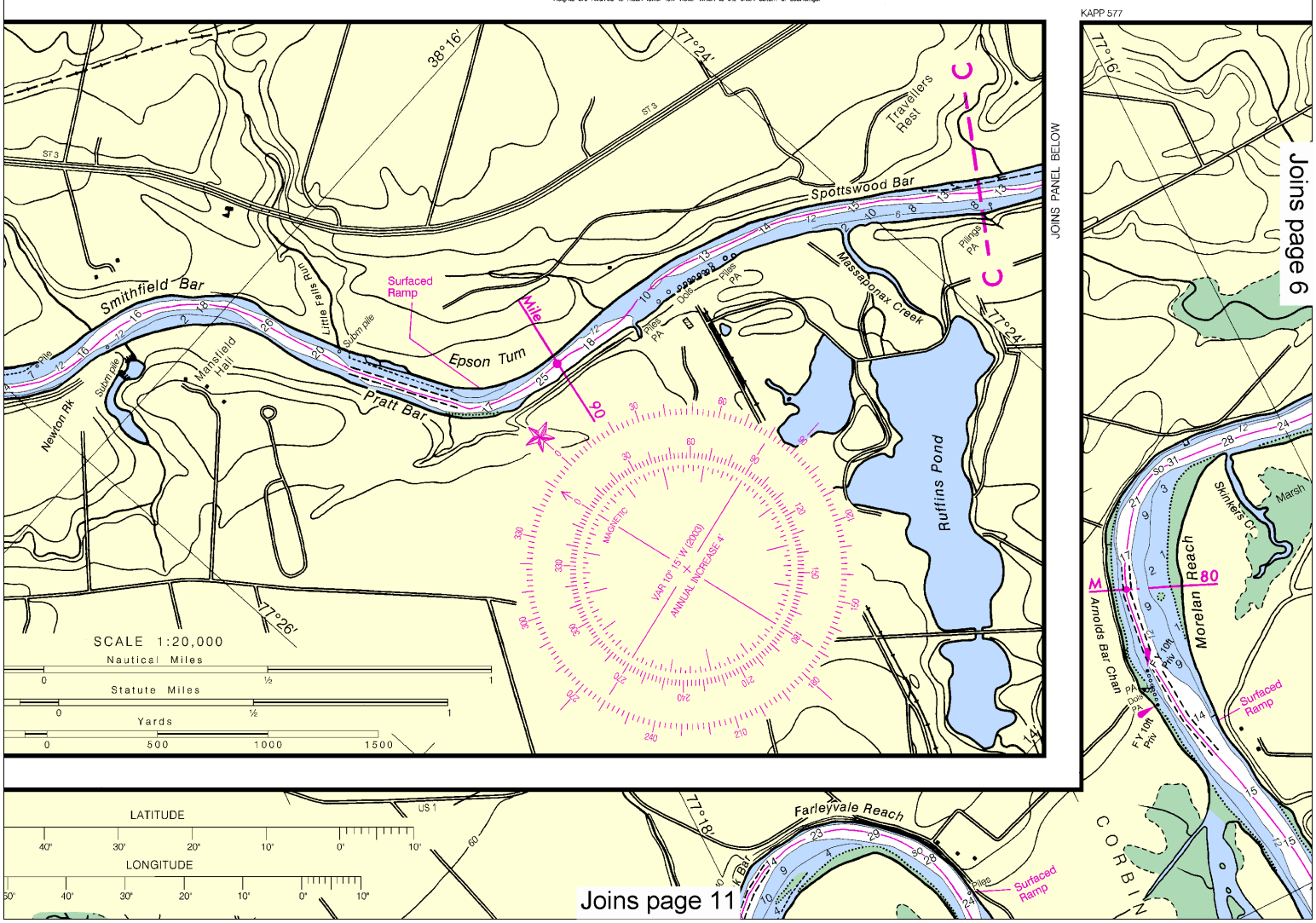
DECEMBER 2003

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0311	2.3	16	0157	2.2
M	0923	0.3	Tu	0806	0.5
	1539	2.4		1415	2.3
	2151	0.2		2042	0.1
2	0412	2.3	17	0256	2.3
Tu	1027	0.3	W	0913	0.2
	1636	2.3		1515	2.2
	2242	0.2		2135	0.0
3	0507	2.4	18	0357	2.5
W	1125	0.3	Th	1020	0.1
	1728	2.3		1617	2.2
	2328	0.2		2231	-0.1
4	0555	2.5	19	0457	2.7
Th	1216	0.3	F	1124	0.0
	1815	2.3		1718	2.2
				2327	-0.3
5	0011	0.1	20	0556	2.9
F	0639	2.6	Sa	1224	-0.2
	1302	0.2		1817	2.3
	1858	2.3			
6	0052	0.1	21	0022	-0.4
Sa	0719	2.7	Su	0653	3.1
	1344	0.1		1322	-0.3
	1938	2.2		1914	2.3
7	0132	0.0	22	0117	-0.5
Su	0758	2.7	M	0749	3.2
	1424	0.1		1417	-0.4
	2016	2.2		2009	2.4
8	0210	0.0	23	0212	-0.5
M	0836	2.7	Tu	0843	3.2
	1503	0.1		1510	-0.4
	2054	2.1		2103	2.4
9	0248	0.0	24	0306	-0.5
Tu	0912	2.7	W	0936	3.2
	1542	0.1		1601	-0.4
	2131	2.1		2155	2.4
10	0326	0.1	25	0400	-0.5
W	0949	2.7	Th	1029	3.1
	1620	0.1		1652	-0.3
	2208	2.1		2249	2.4
11	0404	0.1	26	0454	-0.4
Th	1026	2.6	F	1121	2.9
	1659	0.2		1743	-0.3
	2247	2.0		2342	2.3
12	0443	0.1	27	0549	-0.3
F	1104	2.6	Sa	1213	2.7
	1736	0.2		1833	-0.2
	2327	2.0			
13	0525	0.2	28	0037	2.3
Sa	1145	2.5	Su	0646	0.0
	1819	0.2		1306	2.5
				1923	-0.1
14	0012	2.0	29	0133	2.2
Su	0613	0.2	M	0746	0.1
	1229	2.4		1359	2.3
	1903	0.2		2013	0.0
15	0102	2.1	30	0230	2.2
M	0707	0.3	Tu	0847	0.2
	1319	2.3		1454	2.1
	1951	0.1		2103	0.1
			31	0328	2.2
			W	0949	0.3
				1550	1.9
				2153	0.1

JANUARY 2004

Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
1	0422	2.3	16	0326	2.5
Th	1048	0.3	F	0956	0.1
	1641	1.9		1546	2.0
	2240	0.1		2157	-0.2
2	0515	2.3	17	0432	2.6
F	1142	0.3	Sa	1104	0.0
	1733	1.8		1653	2.0
	2328	0.1		2301	-0.2
3	0607	2.4	18	0538	2.7
Sa	1232	0.2	Su	1209	-0.1
	1821	1.9		1756	2.0
4	0016	0.0	19	0003	-0.3
Su	0650	2.4	M	0641	2.8
	1317	0.2		1309	0.2
	1906	1.9		1900	2.1
5	0100	0.0	20	0104	-0.4
M	0733	2.5	Tu	0739	3.0
	1400	0.1		1404	-0.3
	1948	1.9		1957	2.2
6	0143	-0.1	21	0201	-0.5
Tu	0814	2.5	W	0834	3.0
	1441	0.0		1456	-0.4
	2029	2.0		2051	2.3
7	0225	-0.1	22	0256	-0.5
W	0852	2.6	Th	0925	3.0
	1520	0.0		1544	-0.4
	2108	2.0		2142	2.4
8	0305	-0.1	23	0348	-0.5
Th	0930	2.6	F	1013	2.9
	1557	0.0		1630	-0.4
	2147	2.0		2231	2.4
9	0344	-0.1	24	0439	-0.4
F	1006	2.6	Sa	1100	2.8
	1634	-0.1		1714	-0.3
	2225	2.1		2316	2.4
10	0425	-0.1	25	0529	-0.3
Sa	1043	2.5	Su	1145	2.8
	1710	-0.1		1757	-0.3
	2305	2.1			
11	0507	0.0	26	0005	2.4
Su	1122	2.5	M	0613	-0.3
	1748	-0.1		1229	2.9
	2348	2.2		1839	-0.1
12	0554	0.0	27	0053	2.3
M	1204	2.4	Tu	0710	0.1
	1826	-0.1		1314	2.9
				1927	-0.0
13	0034	2.3	28	0141	2.3
Tu	0646	0.0	W	0804	0.2
	1250	2.3		1402	2.8
	1912	-0.1		2006	0.1
14	0126	2.3	29	0233	2.2
W	0744	0.1	Th	0901	0.3
	1342	2.1		1453	1.8
	2001	-0.1		2057	0.2
15	0223	2.4	30	0330	2.2
Th	0848	0.1	F	1001	0.4
	1441	2.0		1549	1.7
	2057	-0.1		2150	0.2
			31	0426	2.2
			Sa	1101	0.4
				1647	1.7
				2246	0.2

Time meridian 75 W. 0000 is midnight, 1200 is noon.
Heights are referred to mean lower low water which is the chart datum of soundings.



This BookletChart was reduced to 75% of the original chart scale.
The new scale is 1:53333. Barscales have also been reduced and
are accurate when used to measure distances in this BookletChart.

DECEMBER 2003

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 M	0311	2.3	0923	0.3	1539	2.4	2151	0.2
2 Tu	0412	2.3	1027	0.3	1636	2.3	2242	0.2
3 W	0507	2.4	1125	0.3	1728	2.2	2328	0.2
4 Th	0555	2.5	1216	0.3	1815	2.2		
5 F	0011	0.1	0639	2.6	1302	0.2	1858	2.2
6 Sa	0052	0.1	0719	2.7	1344	0.1	1938	2.2
7 Su	0132	0.0	0758	2.7	1424	0.1	2016	2.2
8 M	0210	0.0	0836	2.7	1503	0.1	2054	2.1
9 Tu	0248	0.0	0912	2.7	1542	0.1	2131	2.1
10 W	0326	0.1	0949	2.7	1620	0.1	2208	2.1
11 Th	0404	0.1	1026	2.6	1658	0.2	2247	2.0
12 F	0443	0.1	1104	2.6	1738	0.2	2327	2.0
13 Sa	0525	0.2	1145	2.5	1819	0.2		
14 Su	0012	2.0	0613	0.2	1229	2.4	1903	0.2
15 M	0102	2.1	0707	0.3	1319	2.3	1951	0.1
16 Tu	0157	2.2	0808	0.3	1415	2.3	2042	0.1
17 W	0256	2.3	0913	0.2	1515	2.2	2135	0.0
18 Th	0357	2.5	1020	0.1	1617	2.2	2231	-0.1
19 F	0457	2.7	1124	0.0	1718	2.2	2327	-0.3
20 Sa	0556	2.9	1224	-0.2	1817	2.3		
21 Su	0022	-0.4	0653	3.1	1322	-0.3	1914	2.3
22 M	0117	-0.5	0749	3.2	1417	-0.4	2009	2.4
23 Tu	0212	-0.5	0843	3.2	1510	-0.4	2102	2.4
24 W	0306	-0.5	0936	3.2	1601	-0.4	2155	2.4
25 Th	0400	-0.5	1029	3.1	1652	-0.3	2249	2.4
26 F	0454	-0.4	1121	2.9	1743	-0.3	2342	2.3
27 Sa	0549	-0.2	1213	2.7	1833	-0.2		
28 Su	0037	2.3	0646	0.0	1306	2.5	1923	-0.1
29 M	0133	2.2	0746	0.1	1359	2.3	2013	0.0
30 Tu	0230	2.2	0847	0.2	1454	2.1	2103	0.1
31 W	0328	2.2	0949	0.3	1550	1.9	2153	0.1

JANUARY 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Th	0422	2.3	1048	0.3	1641	1.9	2240	0.1
2 F	0515	2.3	1142	0.3	1733	1.8	2328	0.1
3 Sa	0604	2.4	1232	0.2	1821	1.9		
4 Su	0015	0.0	0650	2.4	1317	0.2	1906	1.9
5 M	0100	0.0	0733	2.5	1400	0.1	1948	1.9
6 Tu	0143	-0.1	0814	2.5	1441	0.0	2029	2.0
7 W	0225	-0.1	0852	2.6	1520	0.0	2108	2.0
8 Th	0305	-0.1	0930	2.6	1557	0.0	2147	2.0
9 F	0344	-0.1	1006	2.6	1634	-0.1	2225	2.1
10 Sa	0425	-0.1	1043	2.5	1710	-0.1	2305	2.1
11 Su	0507	0.0	1122	2.5	1748	-0.1	2348	2.2
12 M	0554	0.0	1204	2.4	1828	-0.1		
13 Tu	0034	2.3	0646	0.0	1250	2.3	1912	-0.1
14 W	0126	2.3	0744	0.1	1342	2.1	2001	-0.1
15 Th	0223	2.4	0848	0.1	1441	2.0	2057	-0.1
16 F	0326	2.5	0956	0.1	1546	2.0	2157	-0.2
17 Sa	0432	2.6	1104	0.0	1653	2.0	2301	-0.2
18 Su	0538	2.7	1209	-0.1	1758	2.0		
19 M	0003	-0.3	0641	2.9	1309	-0.2	1900	2.1
20 Tu	0104	-0.4	0739	3.0	1404	-0.3	1957	2.2
21 W	0201	-0.5	0834	3.0	1456	-0.4	2051	2.3
22 Th	0256	-0.5	0925	3.0	1544	-0.4	2142	2.4
23 F	0348	-0.5	1013	2.9	1630	-0.4	2231	2.4
24 Sa	0439	-0.4	1100	2.8	1714	-0.3	2318	2.4
25 Su	0529	-0.3	1145	2.6	1757	-0.3		
26 M	0005	2.4	0619	-0.1	1229	2.3	1839	-0.1
27 Tu	0053	2.3	0710	0.1	1314	2.1	1922	0.0
28 W	0141	2.3	0804	0.2	1402	1.9	2008	0.1
29 Th	0233	2.2	0901	0.3	1453	1.8	2057	0.2
30 F	0330	2.2	1001	0.4	1549	1.7	2150	0.2
31 Sa	0428	2.2	1101	0.4	1647	1.7	2246	0.2

FEBRUARY 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Su	0526	2.2	1157	0.4	1743	1.7	2341	0.2
2 M	0620	2.3	1248	0.3	1834	1.8		
3 Tu	0032	0.1	0707	2.4	1333	0.2	1922	1.9
4 W	0119	0.0	0750	2.5	1415	0.1	2005	2.0
5 Th	0204	-0.1	0830	2.6	1453	0.0	2045	2.1
6 F	0246	-0.1	0908	2.6	1530	-0.1	2125	2.3
7 Sa	0327	-0.2	0945	2.6	1605	-0.2	2204	2.4
8 Su	0409	-0.2	1022	2.6	1641	-0.2	2243	2.5
9 M	0453	-0.2	1101	2.5	1718	-0.2	2325	2.5
10 Tu	0539	-0.1	1143	2.4	1758	-0.2		
11 W	0011	2.6	0630	-0.1	1229	2.3	1842	-0.2
12 Th	0102	2.6	0726	0.0	1320	2.2	1933	-0.1
13 F	0200	2.6	0830	0.1	1420	2.0	2031	-0.1
14 Sa	0306	2.6	0939	0.2	1527	2.0	2137	0.0
15 Su	0418	2.6	1050	0.2	1638	2.0	2247	-0.1
16 M	0528	2.7	1156	0.1	1748	2.1	2355	-0.2
17 Tu	0633	2.8	1256	0.0	1850	2.2		
18 W	0057	-0.3	0730	2.9	1349	-0.2	1946	2.4
19 Th	0154	-0.3	0821	2.9	1436	-0.3	2037	2.5
20 F	0246	-0.4	0908	2.9	1520	-0.3	2124	2.6
21 Sa	0334	-0.4	0952	2.8	1601	-0.3	2207	2.7
22 Su	0420	-0.3	1033	2.7	1640	-0.2	2249	2.7
23 M	0505	-0.2	1113	2.5	1718	-0.2	2330	2.6
24 Tu	0549	0.0	1152	2.3	1756	0.0		
25 W	0011	2.5	0633	0.2	1232	2.2	1836	0.1
26 Th	0053	2.4	0720	0.3	1314	2.0	1918	0.2
27 F	0141	2.3	0812	0.5	1401	1.9	2006	0.3
28 Sa	0235	2.2	0911	0.6	1456	1.8	2101	0.4
29 Su	0337	2.2	1014	0.6	1558	1.8	2203	0.4

MARCH 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 M	0442	2.2	1116	0.6	1701	1.8	2304	0.4
2 Tu	0542	2.3	1210	0.5	1759	1.9		
3 W	0001	0.3	0634	2.4	1257	0.3	1850	2.1
4 Th	0052	0.1	0719	2.5	1339	0.2	1935	2.3
5 F	0140	0.0	0801	2.6	1418	0.0	2017	2.4
6 Sa	0224	-0.1	0840	2.7	1456	-0.1	2058	2.6
7 Su	0308	-0.2	0920	2.7	1533	-0.2	2138	2.8
8 M	0352	-0.2	1000	2.7	1610	-0.2	2220	2.9
9 Tu	0438	-0.2	1041	2.6	1650	-0.2	2304	2.9
10 W	0526	-0.2	1125	2.5	1733	-0.2	2352	2.9
11 Th	0617	0.0	1212	2.4	1820	-0.1		
12 F	0045	2.9	0714	0.1	1306	2.2	1914	0.0
13 Sa	0145	2.8	0817	0.2	1407	2.1	2017	0.1
14 Su	0254	2.7	0927	0.3	1517	2.1	2128	0.2
15 M	0408	2.7	1037	0.3	1631	2.1	2241	0.1
16 Tu	0519	2.7	1141	0.2	1740	2.2	2349	0.1
17 W	0621	2.8	1237	0.1	1840	2.4		
18 Th	0050	0.0	0715	2.8	1326	0.0	1932	2.6
19 F	0144	-0.1	0803	2.8	1410	-0.1	2018	2.7
20 Sa	0232	-0.2	0847	2.8	1451	-0.1	2101	2.8
21 Su	0317	-0.2	0927	2.7	1529	-0.1	2140	2.9
22 M	0359	-0.1	1005	2.6	1605	-0.1	2218	2.9
23 Tu	0439	0.0	1042	2.5	1641	0.0	2255	2.8
24 W	0519	0.1	1118	2.4	1717	0.1	2332	2.7
25 Th	0559	0.3	1154	2.2	1755	0.2		
26 F	0012	2.6	0642	0.4	1233	2.1	1836	0.4
27 Sa	0056	2.4	0730	0.6	1318	2.0	1923	0.5
28 Su	0147	2.3	0825	0.7	1411	1.9	2018	0.5
29 M	0247	2.3	0926	0.7	1513	1.9	2120	0.6
30 Tu	0352	2.3	1027	0.7	1618	2.0	2225	0.5
31 W	0455	2.3	1123	0.6	1719	2.1	2326	0.4

APRIL 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Th	0550	2.4	1212	0.4	1812	2.3		
2 F	0021	0.3	0640	2.5	1255	0.2	1859	2.5
3 Sa	0112	0.1	0725	2.7	1337	0.1	1944	2.8
4 Su	0200	0.0	0809	2.7	1417	0.0	2028	3.0
5 M	0247	-0.2	0852	2.8	1458	-0.1	2112	3.1
6 Tu	0334	-0.2	0936	2.7	1540	-0.2	2158	3.2
7 W	0422	-0.2	1021	2.7	1625	-0.2	2245	3.2
8 Th	0513	-0.1	1109	2.6	1712	-0.1	2337	3.2
9 F	0606	0.0	1200	2.5	1805	0.0		
10 Sa	0033	3.0	0704	0.1	1257	2.3	1904	0.1
11 Su	0136	2.9	0807	0.3	1401	2.3	2010	0.2
12 M	0245	2.7	0913	0.3	1512	2.2	2122	0.3
13 Tu	0356	2.7	1018	0.3	1623	2.3	2234	0.3
14 W	0503	2.7	1118	0.3	1727	2.5	2340	0.2
15 Th	0602	2.7	1210	0.2	1823	2.6		
16 F	0038	0.1	0653	2.7	1257	0.1	1911	2.8
17 Sa	0129	0.0	0739	2.7	1339	0.1	1955	2.9
18 Su	0215	0.0	0821	2.6	1418	0.0	2034	2.9
19 M	0257	0.0	0900	2.6	1455	0.1	2112	3.0
20 Tu	0336	0.0	0937	2.5	1531	0.1	2148	2.9
21 W	0415	0.1	1012	2.4	1607	0.2	2224	2.8
22 Th	0453	0.2	1048	2.3	1644	0.2	2301	2.7
23 F	0532	0.3	1124	2.2	1722	0.3	2340	2.6
24 Sa	0613	0.5	1203	2.1	1803	0.4		
25 Su	0022	2.5	0657	0.6	1247	2.1	1849	0.5
26 M	0109	2.4	0747	0.6	1337	2.0	1942	0.6
27 Tu	0203	2.3	0841	0.6	1435	2.0	2042	0.6
28 W	0303	2.3	0937	0.6	1536	2.1	2146	0.6
29 Th	0403	2.3	1030	0.5	1635	2.3	2249	0.5
30 F	0501	2.4	1120	0.4	1730	2.5	2348	0.3

MAY 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Sa	0556	2.5	1208	0.2	1822	2.8		
2 Su	0043	0.1	0647	2.6	1254	0.1	1911	3.0
3 M	0135	0.0	0736	2.6	1340	-0.1	1959	3.2
4 Tu	0226	-0.2	0825	2.6	1426	-0.2	2048	3.3
5 W	0316	-0.2	0914	2.6	1514	-0.2	2138	3.4
6 Th	0408	-0.2	1003	2.6	1604	-0.2	2230	3.3
7 F	0500	-0.2	1055	2.6	1657	-0.1	2325	3.2
8 Sa	0555	0.0	1150	2.5	1754	0.0		
9 Su	0023	3.1	0652	0.1	1250	2.4	1856	0.1
10 M	0125	2.9	0752	0.2	1354	2.4	2003	0.2
11 Tu	0230	2.7	0852	0.2	1500	2.4	2113	0.3
12 W	0335	2.6	0951	0.2	1605	2.5	2221	0.3
13 Th	0437	2.5	1046	0.2	1705	2.6	2323	0.3
14 F	0534	2.5	1135	0.2	1758	2.7		
15 Sa	0019	0.2	0624	2.4	1221	0.2	1844	2.8
16 Su	0108	0.2	0710	2.4	1304	0.1	1927	2.9
17 M	0153	0.1	0752	2.4	1344	0.1	2007	2.9
18 Tu	0234	0.1	0831	2.4	1422	0.1	2045	2.9
19 W	0314	0.1	0909	2.3	1501	0.2	2122	2.9
20 Th	0352	0.2	0946	2.3	1538	0.2	2159	2.8
21 F	0430	0.2	1022	2.2	1617	0.3	2237	2.7
22 Sa	0509	0.3	1100	2.2	1656	0.3	2315	2.6
23 Su	0549	0.4	1140	2.1	1737	0.4	2355	2.5
24 M	0630	0.4	1223	2.1	1822	0.5		
25 Tu	0039	2.5	0714	0.5	1310	2.1	1913	0.5
26 W	0127	2.4	0800	0.4	1402	2.2	2010	0.5
27 Th	0220	2.3	0849	0.4	1458	2.3	2111	0.5
28 F	0317	2.3	0940	0.3	1554	2.5	2214	0.4
29 Sa	0415	2.3	1031	0.2	1651	2.7	2316	0.2
30 Su	0514	2.3	1123	0.1	1746	2.9		
31 M	0015	0.1	0611	2.4	1215	0.0	1841	3.1

JUNE 2004

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Tu	0111	-0.1	0706	2.4	1307	-0.1	1935	3.3
2 W	0206	-0.2	0800	2.5	1400	-0.2	2029	3.4
3 Th	0259	-0.2	0853	2.5	1454	-0.3	2123	3.4
4 F	0353	-0.2	0947	2.5	1549	-0.2	2218	3.3
5 Sa	0446	-0.2	1042	2.5	1645	-0.2	2314	3.2
6 Su	0540	-0.1	1139	2.5	1744	-0.1		
7 M	0010	3.0	0634	-0.1	1237	2.5	1845	0.1
8 Tu	0108	2.8	0729	0.0	1338	2.5	1949	0.2
9 W	0207	2.6	0823	0.1	1438	2.5	2054	0.3
10 Th	0306	2.5	0916	0.1	1538	2.6	2158	0.3
11 F	0404	2.3	1007	0.2	1634	2.6	2258	0.3
12 Sa	0459	2.2	1056	0.2	1726	2.7	2353	0.3
13 Su	0550	2.2	1143	0.2	1814	2.7		
14 M	0043	0.3	0637	2.2	1228	0.2	1858	2.7
15 Tu	0128	0.2	0721	2.2	1311	0.2	1941	2.8
16 W	0211	0.2	0803	2.2	1353	0.2	2021	2.8
17 Th	0251	0.2	0843	2.2	1434	0.2	2100	2.8
18 F	0331	0.2	0922	2.2	1515	0.2	2139	2.7
19 Sa	0409	0.2	1000	2.2	1555	0.2	2216	2.7
20 Su	0447	0.2	1039	2.2	1634	0.3	2253	2.6
21 M	0524	0.3	1118	2.2	1716	0.3	2331	2.6
22 Tu	0602	0.3	1159	2.2	1800	0.4		
23 W	0011	2.5	0641	0.3	1243	2.3	1848	0.4
24 Th	0055	2.4	0722	0.3	1331	2.4	1942	0.4
25 F	0144	2.3	0807	0.2	1423	2.5	2042	0.4
26 Sa	0238	2.3	0856	0.2	1519	2.6	2144	0.3
27 Su	0337	2.2	0949	0.1	1618	2.8	2248	0.2
28 M	0439	2.2	1046	0.0	1718	3.0	2351	0.1
29 Tu	0541	2.3	1144	0.0	1818	3.1		
30 W	0051	0.0	0641	2.3	1243	-0.1	1917	3.2

JULY 2004

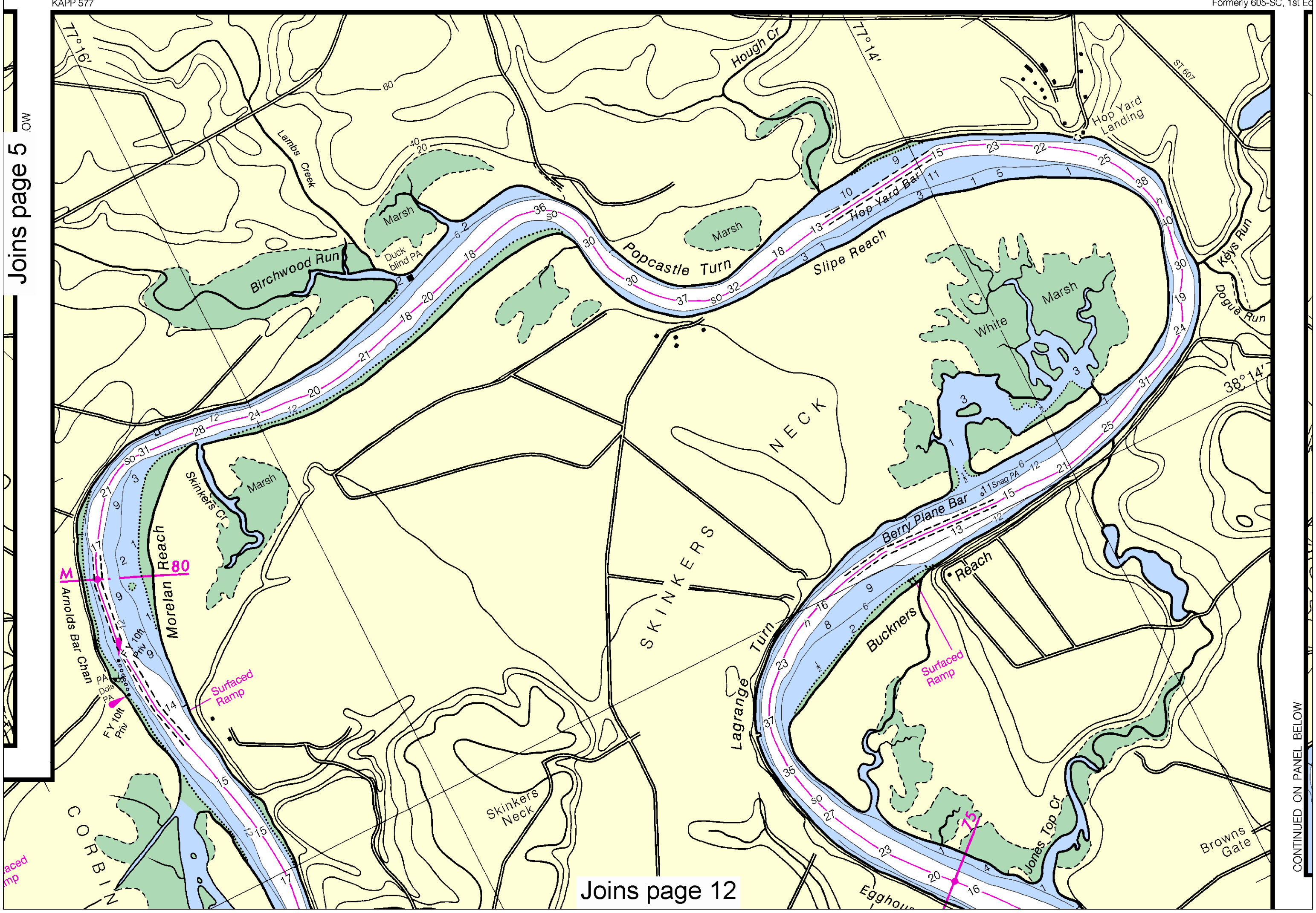
Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Th	0148	-0.1	0740	2.4	1341	-0.2	2014	3.3
2 F	0243	-0.2	0837	2.5	1439	-0.3	2110	3.3
3 Sa	0337	-0.2	0933	2.6	1536	-0.3	2204	3.3
4 Su	0428	-0.2	1028	2.6	1633	-0.2	2258	3.1
5 M	0519	-0.2	1122	2.7	1730	-0.1	2350	3.0
6 Tu	0608	-0.1	1217	2.7	1828	0.0		
7 W	0043	2.8	0657	0.0	1311	2.6	1926	0.2
8 Th	0135	2.5	0746	0.1	1406	2.6	2026	0.3
9 F	0229	2.3	0834	0.2	1501	2.6	2126	0.4
10 Sa	0324	2.2	0924	0.3	1556	2.6	2225	0.4
11 Su	0418	2.1	1014	0.3	1650	2.6	2321	0.5
12 M	0512	2.0	1104	0.3	1741	2.6		
13 Tu	0013	0.4	0603	2.0	1154	0.3	1830	2.7
14 W	0101	0.4	0651	2.1	1242	0.3	1916	2.7
15 Th	0145	0.4	0735	2.1	1328	0.3	1959	2.7
16 F	0227	0.3	0818	2.2	1412	0.3	2039	2.8
17 Sa	0306	0.3	0859	2.2	1453	0.2	2117	2.8
18 Su	0344	0.2	0938	2.3	1534	0.2	2154	2.8
19 M	0420	0.2	1016	2.3	1614	0.3	2229	2.7
20 Tu	0455	0.2	1054	2.4	1656	0.3	2306	2.7
21 W	0530	0.2	1133	2.5	1739	0.3	2345	2.6
22 Th	0606	0.2	1215	2.6	1826	0.3		
23 F	0027	2.5	0646	0.2	1301	2.6	1919	0.4
24 Sa	0114	2.4	0730	0.2	1353	2.7	2018	0.4
25 Su	0208	2.3	0821	0.2	1450	2.8	2121	0.4
26 M	0308	2.2	0918	0.2	1553	2.9	2228	0.3
27 Tu	0414	2.2	1021	0.1	1658	3.0	2333	0.3
28 W	0520	2.3	1125	0.1	1803	3.1		
29 Th	0035	0.2	0625	2.4	1229	0.0	1904	3.2
30 F	0133	0.0	0726	2.5	1330	-0.1	2002	3.3
31 Sa	0226	-0.1	0823	2.6	1428	-0.2	2056	3.3

AUGUST

Day	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.	Time h.m.	Ht. ft.
1 Su	0317	-0.1	0917	2.8	1524	-0.2	2147	3.2
2 M	0404	-0.2	1008	2.9	1618	-0.1	2236	3.1
3 Tu	0450	-0.1	1058	2.9	1711	0.0	2324	2.9
4 W	0535	0.0	1148	2.9	1803	0.1		
5 Th	0011	2.7	0619	0.1	1236	2.8	1856	0.3
6 F	0058	2.5	0704	0.2	1326	2.7	1951	0.5
7 Sa	0148	2.3	0750	0.3	1418	2.7	2048	0.6
8 Su	0239	2.2	0839	0.4	1513	2.6	2147	0.7
9 M	0335	2.1	0932	0.5	1611	2.6	2245	0.7
10 Tu	0432	2.0	1027	0.5	1708	2.6	2341	0.7
11 W	0528	2.1	1122	0.5	1801	2.6		
12 Th	0031	0.6	0620	2.1	1215	0.5	1850	2.7
13 F	0116	0.5	0708	2.2	1303	0.4	1933	2.8
14 Sa	0157	0.4	0751	2.4	1349	0.4	2013	2.8
15 Su	0236	0.3	0832	2.5	1431	0.3	2050	2.9

KAPP 577

Formerly 605-SC, 1st Ed



Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~

Nautical Miles: 1, ½, 0, 1, 2, 3

Yards: 1000, 0, 1000, 2000, 3000, 4000, 5000

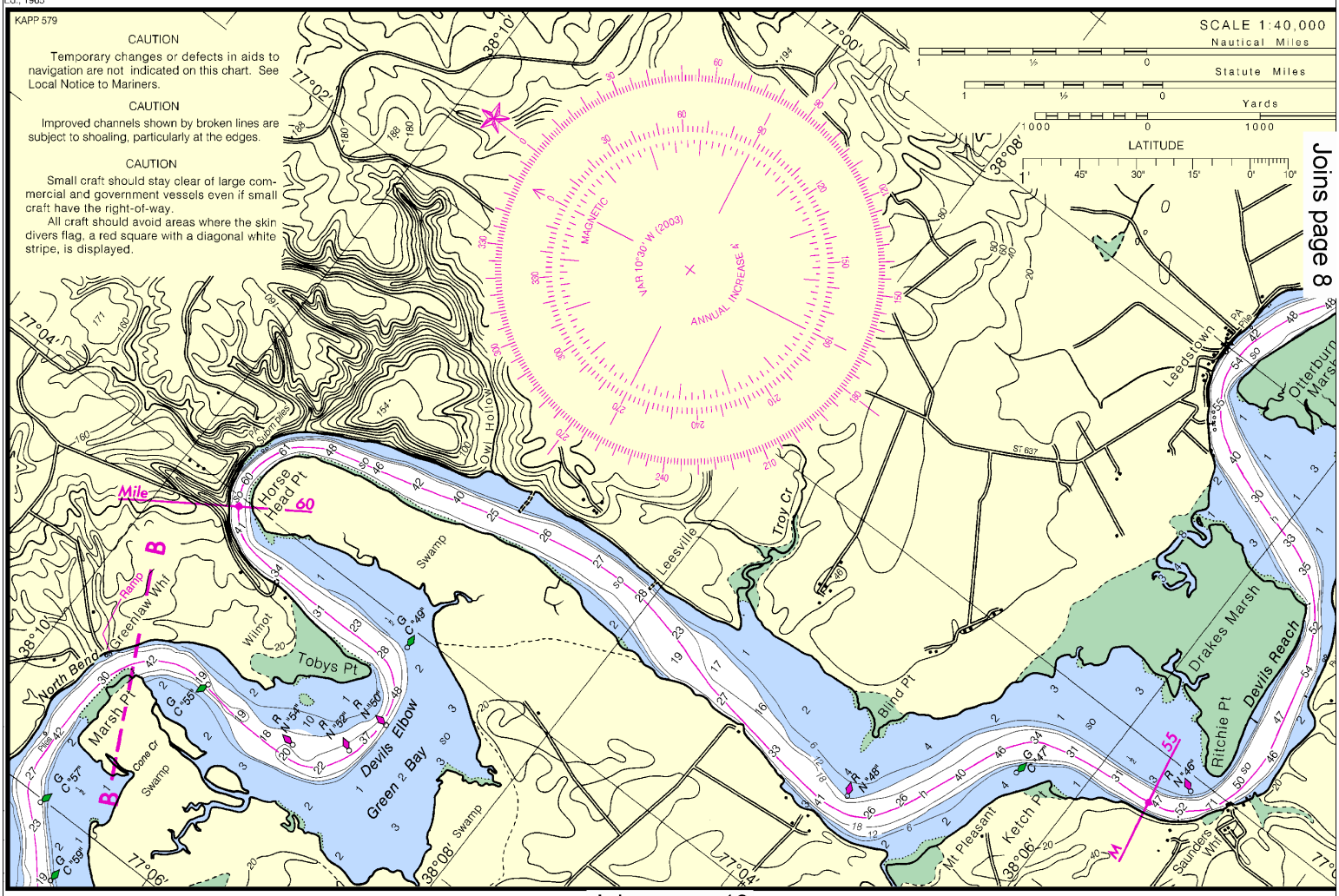
See Note on page 5.

T 2004			SEPTEMBER 2004			OCTOBER 2004			NOVEMBER 2004		
Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.	Day	Time h.m.	Ht. ft.
16	0312	0.3	1	0417	0.0	16	0345	0.2	1	0421	0.2
M	0911	2.8	W	1030	3.1	Th	0957	3.1	F	1039	3.1
	1513	0.3		1647	0.1		1615	0.2		1705	0.4
	2127	2.9		2253	2.9		2214	2.8		2301	2.6
17	0347	0.2	2	0458	0.1	17	0423	0.2	2	0459	0.3
Tu	0948	2.7	Th	1114	3.0	F	1039	3.2	Sa	1120	3.0
	1554	0.3		1735	0.3		1701	0.3		1749	0.5
	2203	2.8		2338	2.7		2256	2.7		2341	2.4
18	0421	0.2	3	0538	0.2	18	0503	0.2	3	0539	0.5
W	1026	2.6	F	1157	3.0	Sa	1124	3.2	Su	1202	2.9
	1635	0.3		1823	0.5		1751	0.3		1835	0.7
	2240	2.8					2342	2.8			
19	0456	0.2	4	0019	2.5	19	0549	0.3	4	0023	2.3
Th	1105	2.6	Sa	0620	0.4	Su	1218	3.2	M	0622	0.6
	1718	0.3		1243	2.9		1846	0.4		1249	2.7
	2319	2.7		1912	0.6					1925	0.8
20	0533	0.2	5	0104	2.3	20	0034	2.5	5	0111	2.2
F	1148	2.6	Su	0704	0.5	M	0640	0.3	Tu	0711	0.7
	1807	0.3		1332	2.7		1313	3.1		1342	2.6
				2006	0.6		1947	0.3		2002	0.9
21	0002	2.6	6	0154	2.2	21	0134	2.4	6	0207	2.1
Sa	0614	0.2	M	0754	0.6	Tu	0741	0.4	W	0808	0.8
	1235	3.0		1427	2.6		1419	3.0		1443	2.5
	1900	0.4		2105	0.9		2054	0.6		2121	0.9
22	0051	2.5	7	0250	2.1	22	0242	2.3	7	0310	2.1
Su	0701	0.3	Tu	0850	0.7	W	0850	0.5	Th	0911	0.8
	1329	3.0		1526	2.6		1530	3.0		1544	2.5
	2000	0.5		2205	0.9		2203	0.6		2219	0.9
23	0147	2.4	8	0351	2.1	23	0356	2.4	8	0413	2.2
M	0756	0.3	W	0950	0.8	Th	1003	0.4	F	1014	0.8
	1430	3.0		1630	2.6		1654	3.0		1643	2.6
	2105	0.5		2303	0.8		2307	0.5		2316	0.7
24	0250	2.3	9	0452	2.2	24	0508	2.5	9	0510	2.3
Tu	0852	0.3	Th	1050	0.7	F	1114	0.4	Sa	1113	0.7
	1538	3.0		1727	2.6		1744	3.1		1734	2.6
	2214	0.5		2355	0.7					2356	0.8
25	0400	2.3	10	0548	2.3	25	0004	0.3	10	0559	2.5
W	1007	0.3	F	1148	0.6	Sa	0608	2.7	Su	1206	0.6
	1648	3.0		1816	2.7		1217	0.3		1820	2.7
	2320	0.4					1841	3.1			
26	0510	2.4	11	0040	0.6	26	0055	0.2	11	0037	0.4
Th	1117	0.2	Sa	0638	2.4	Su	0702	2.9	M	0644	2.7
	1754	3.1		1237	0.5		1314	0.2		1254	0.4
				1900	2.6		1931	3.1		1906	2.8
27	0021	0.3	12	0120	0.5	27	0140	0.1	12	0116	0.3
F	0616	2.5	Su	0720	2.6	M	0751	3.1	Tu	0726	2.9
	1222	0.1		1323	0.4		1405	0.1		1340	0.3
	1854	3.2		1940	2.9		2017	3.1		1940	2.8
28	0116	0.2	13	0158	0.4	28	0223	0.1	13	0154	0.2
Sa	0715	2.7	M	0801	2.6	Tu	0836	3.2	W	0807	3.1
	1302	0.0		1407	0.3		1453	0.1		1425	0.1
	1949	3.3		2019	2.9		2101	3.0		2026	2.9
29	0208	0.0	14	0234	0.3	29	0303	0.1	14	0232	0.1
Su	0808	2.9	Tu	0839	2.9	W	0911	3.2	Th	0845	3.1
	1418	0.0		1449	0.3		1538	0.1		1510	0.1
	2039	3.3		2057	2.9		2142	2.9		2108	2.8
30	0252	0.0	15	0309	0.2	30	0347	0.1	15	0312	0.0
M	0858	3.0	W	0918	3.0	Th	0959	3.2	F	0931	3.0
	1510	0.0		1532	0.3		1622	0.2		1556	0.1
	2125	3.2		2135	2.9		2222	2.8		2151	2.8
31	0335	0.0									
Tu	0945	3.1									
	1559	0.0									
	2210	3.1									

16	0355	0.0	1	0505	0.4	16	0520	0.0			
Sa	1017	3.4	M	1139	2.8	Tu	1151	3.1			
	1645	0.1		1802	0.6		1822	0.1			
	2237	2.7		2349	2.2						
17	0440	0.1	2	0547	0.5	17	0015	2.4			
Su	1107	3.3	Tu	1212	2.6	W	0629	0.1			
	1737	0.2		1849	0.7		1252	3.0			
	2327	2.6					1921	0.1			
18	0531	0.2	3	0035	2.1	18	0119	2.3			
M	1201	3.2	W	0635	0.8	Th	0727	0.2			
	1834	0.3		1300	2.5		1356	2.8			
				1940	0.7		2022	0.2			
19	0023	2.5	4	0128	2.1	19	0227	2.4			
Tu	0628	0.3	Th	0729	0.7	F	0838	0.3			
	1302	3.1		1354	2.4		1505	2.7			
	1936	0.4		2034	0.7		2122	0.2			
20	0127	2.4	5	0227	2.1	20	0335	2.4			
W	0734	0.4	F	0830	0.7	Sa	0949	0.3			
	1410	3.0		1452	2.4		1605	2.6			
	2042	0.5		2127	0.7		2219	0.1			
21	0238	2.4	6	0328	2.2	21	0436	2.6			
Th	0846	0.4	Sa	0933	0.7	Su	1055	0.2			
	1525	2.9		1549	2.4		1704	2.5			
	2147	0.4		2218	0.6		2310	0.1			
22	0350	2.5	7	0425	2.3	22	0534	2.7			
F	1000	0.4	Su	1034	0.6	M	1154	0.2			
	1628	2.9		1644	2.4		1758	2.4			
	2247	0.4		2304	0.4		2358	0.0			
23	0457	2.6	8	0517	2.5	23	0624	2.8			
Sa	1108	0.4	M	1131	0.5	Tu	1240	0.1			
	1728	2.9		1736	2.5		1846	2.4			
	2340	0.2		2349	0.3						
24	0554	2.8	9	0605	2.7	24	0042	0.0			
Su	1209	0.3	Tu	1223	0.3	W	0709	2.9			
	1822	2.9		1823	2.5		1333	0.1			
							1930	2.4			
25	0028	0.2	10	0032	0.1	25	0124	0.0			
M	0645	3.0	W	0651	3.0	Th	0751	2.9			
	1302	0.2		1313	0.1		1416	0.1			
	1910	2.8		1910	2.6		2010	2.3			
26	0112	0.1	11	0115	0.0	28	0204	0.0			
Tu	0731	3.1	Th	0736	3.2	F	0830	2.9			
	1350	0.1		1401	0.0		1457	0.1			
	1954	2.8		1956	2.6		2049	2.3			
27	0153	0.1	12	0200	-0.1	27	0243	0.0			
W	0813	3.2	F	0823	3.3	Sa	0908	2.9			
	1435	0.1		1450	-0.1		1537	0.1			
	2035	2.7		2043	2.6		2127	0.2			
28	0232	0.1	13	0245	-0.2	28	0321	0.1			
Th	0853	3.2	Sa	0911	3.4	Su	0946	2.8			
	1517	0.1		1540	-0.1		1616	0.2			
	2114	2.8		2131	2.6		2204	2.2			
29	0310	0.1	14	0333	-0.2	29	0400	0.1			
F	0931	3.1	Su	1001	3.4	M	1024	2.7			
	1558	0.2		1631	-0.1		1655	0.3			
	2152	2.5		2222	2.5		2243	2.1			
30	0347	0.2	15	0424	-0.1	30	0439	0.2			
Sa	1009	3.0	M	1054	3.3	Tu	1103	2.5			
	1638	0.3		1725	0.0		1735	0.3			
	2229	2.4		2316	2.5		2323	2.0			
31	0425	0.3									
Su	1048	2.9									
	1719	0.5									
	2308	2.3									

NOAA and its partner,
and critical corrections.
Editions are available 5-8
about Print-on-Demand
help@NauticalCharts.
help@OceanGrafix.com.

Ed., 1965



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 0413 1/22/2013,
NGA Weekly Notice to Mariners: 0413 1/26/2013,
Canadian Coast Guard Notice to Mariners: n/a.

MARINE WEATHER FORECASTS

NATIONAL WEATHER SERVICE	TELEPHONE NUMBERS	OFFICE HOURS
Baltimore, MD / Washington, DC	*(703) 260-0107	24 hours daily
Wakefield, VA	*(757) 899-4200	24 hours daily
Newport, NC	*(252) 223-5737	24 hours daily

* Recorded

NOAA WEATHER RADIO BROADCASTS

CITY	STATION	FREQ.	BROADCAST TIMES
Manassas, Va.	KHB-36	162.55 MHz	24 hours daily
Salisbury, Md.	KEC-92	162.475 MHz	24 hours daily
Norfolk, Va.	KHB-37	162.55 MHz	24 hours daily
Heathsville, Va.	WXM-57	162.40 MHz	24 hours daily

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

CITY	STATION	FREQ.	BROADCAST TIMES-EST	SPECIAL WARNI
Hampton Roads, Va.	NMN-80	2670 kHz	8:33 AM & 9:03 PM	* Recorded

Distress calls for small craft are made on 2182 kHz or channel 16 (156.80 MHz) VHF.

PRINT-ON-DEMAND CHARTS

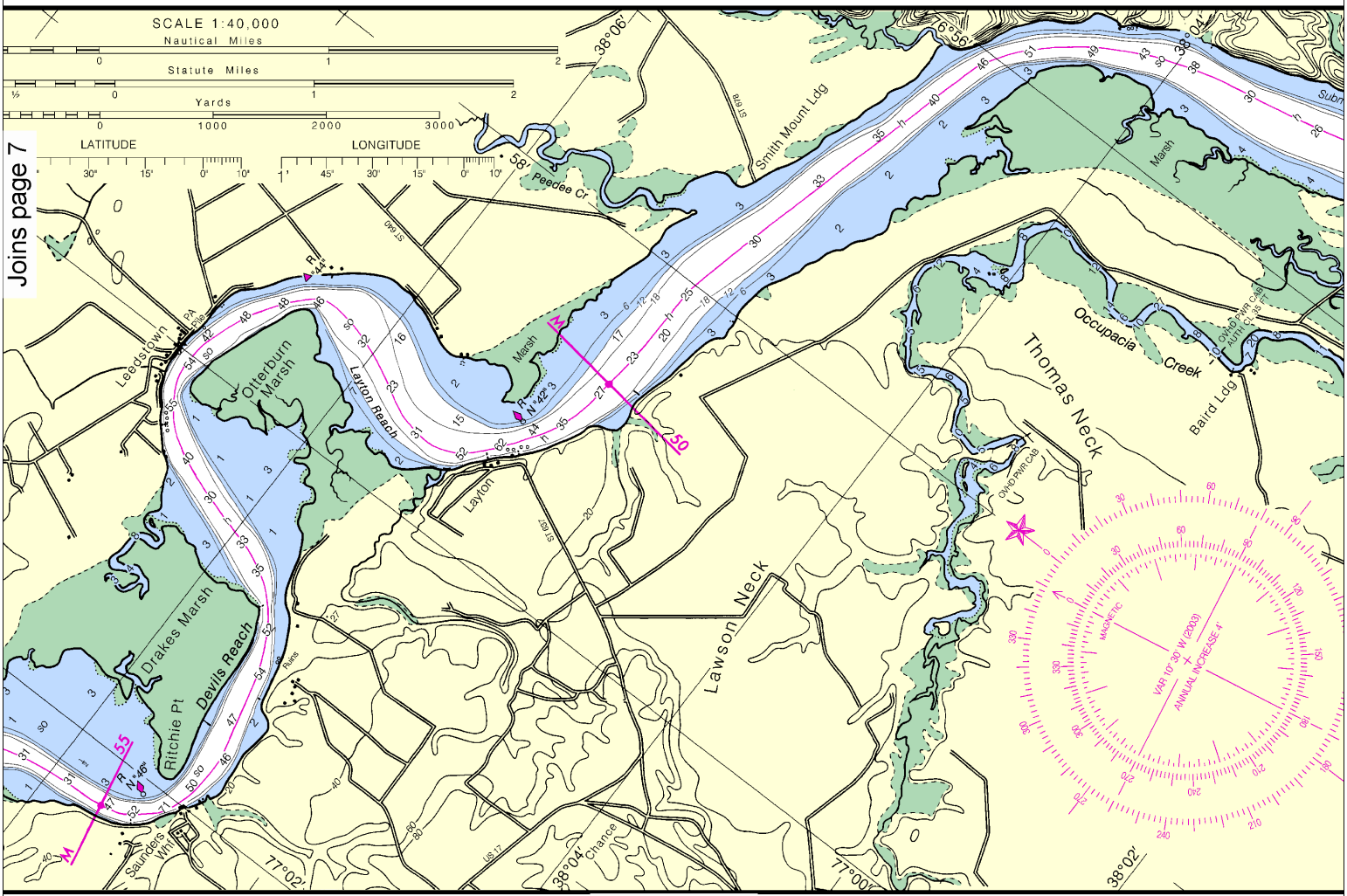
NOAA and its partner, OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4683, http://NauticalCharts.gov, help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or help@OceanGrafix.com.

PUBLIC BOATING INSTRUCTION PROGRAMS

The United States Power Squadrons (USPS) and U.S. Coast Guard Auxiliary (USCGAUX), national organizations of boatmen, conduct extensive boating instruction programs in communities throughout the United States. For information regarding these educational courses, contact the following sources:

USPS - Local Squadron Commander or USPS Headquarters, Post Office Box 30423, Raleigh, N.C. 27612, 919-821-0281.

USCGAUX-5th Coast Guard District, Federal Building, 431 Crawford St., Portsmouth, VA 23704-5004, Tel. 804-398-6208 or USCG Headquarters (G-BAU), Washington, D.C. 20593-0001.



Printed at reduced scale.

~~SCALE 1:40,000~~
Nautical Miles
1 ½ 0 1 2 3

Yards
1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Note: Chart grid lines are aligned with true north.

MERCATOR PROJECTION AT SCALE 1:20,000 & 40,000
SOUNDINGS IN FEET AT MEAN LOWER LOW WATER
NORTH AMERICAN DATUM OF 1983
(WORLD GEODETIC SYSTEM 1984)

HEIGHTS

Heights in feet above Mean High Water.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

ABBREVIATIONS

(For complete list of Symbols and Abbreviations, see Chart No. 1)

NING

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Imagery and Mapping Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 3 for important supplemental information.

Additional information can be obtained at nauticalcharts.noaa.gov.

NAUTICAL CHART 12237

VIRGINIA

RAPPAHANNOCK RIVER

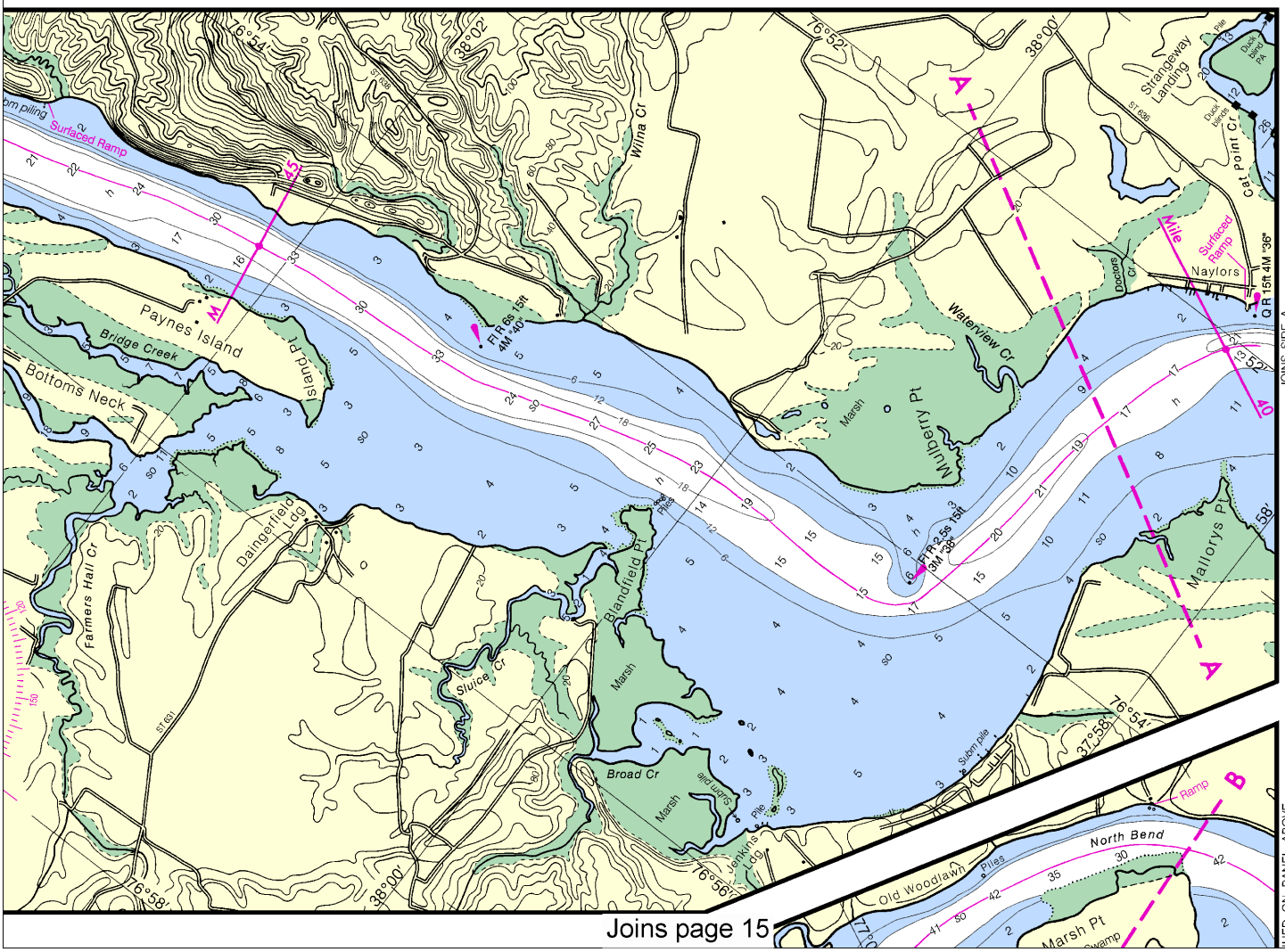
CORROTOMAN RIVER TO FREDERICKSBURG

NSN 7642014010364
NIMA REFERENCE NO. 12XHA12237

ED. NO. 27

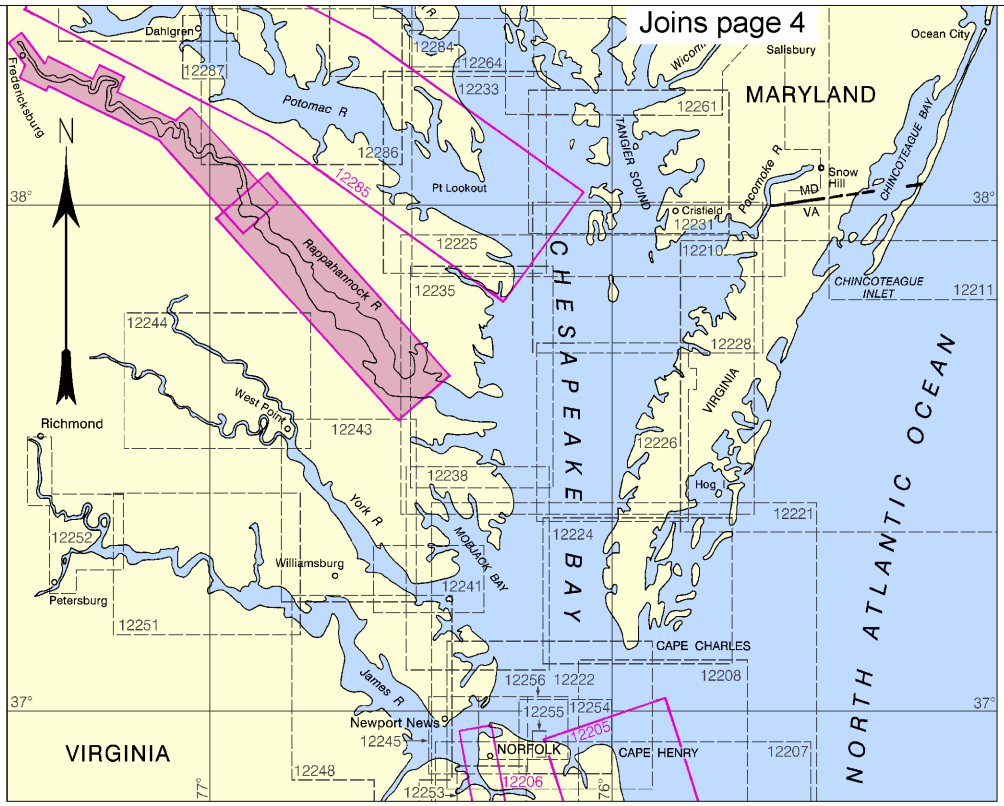
Chart 12237 27th Ed., Sep./03 ■
Corrected through NM Sep. 20/03, LNM Sep. 2/03

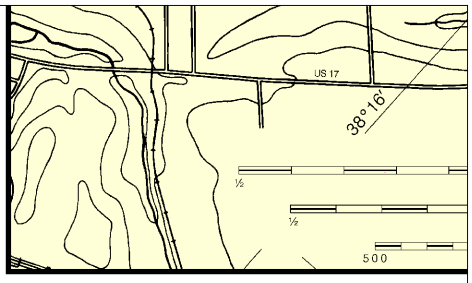
Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY



Joins page 15

Joins page 4

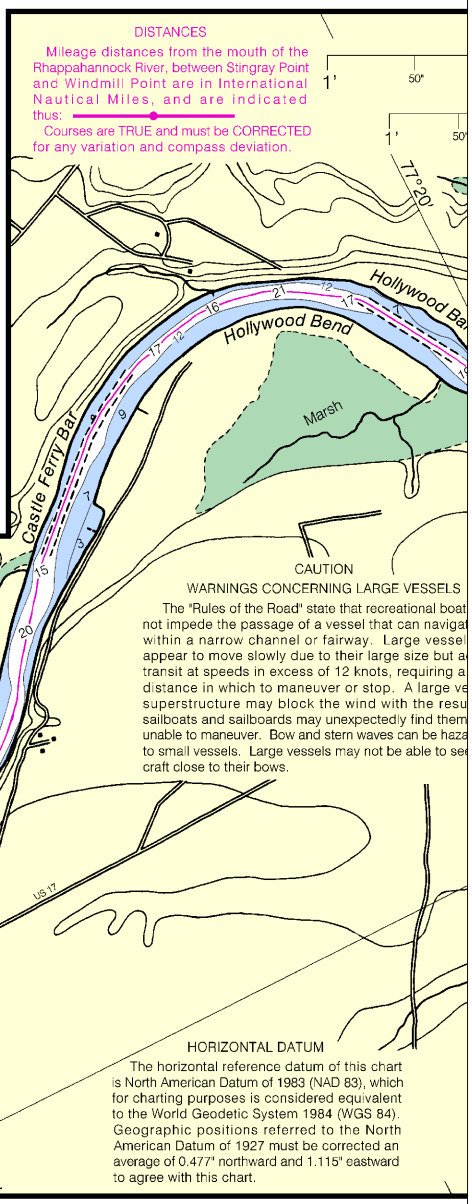




DISTANCES

Mileage distances from the mouth of the Rhappahannock River, between Stingray Point and Windmill Point are in International Nautical Miles, and are indicated thus:

Courses are TRUE and must be CORRECTED for any variation and compass deviation.



RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

WARNINGS CONCERNING LARGE VESSELS

The "Rules of the Road" state that recreational boat not impede the passage of a vessel that can navigat within a narrow channel or fairway. Large vessel appear to move slowly due to their large size but a transit at speeds in excess of 12 knots, requiring a distance in which to maneuver or stop. A large ve superstructure may block the wind with the resu sailboats and sailboards may unexpectedly find them unable to maneuver. Bow and stern waves can be haza to small vessels. Large vessels may not be able to see craft close to their bows.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.477" northward and 1.115" eastward to agree with this chart.

SIDE B

JOINS PANEL ABOVE

12237 27th Ed., Sep./03; Corrected through NM Sep. 20/03, LNM Sep. 2/03

Joins page 16

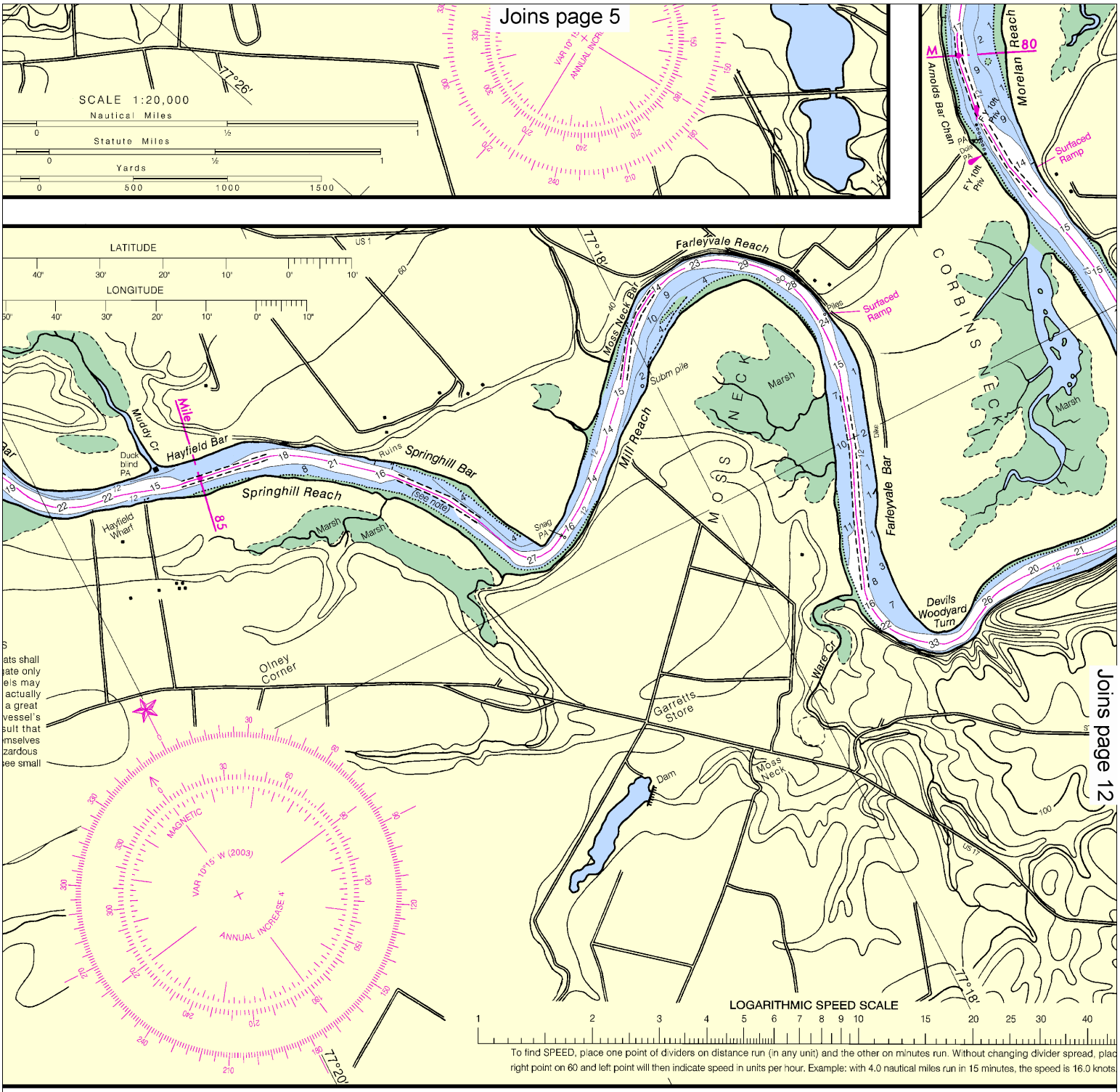
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

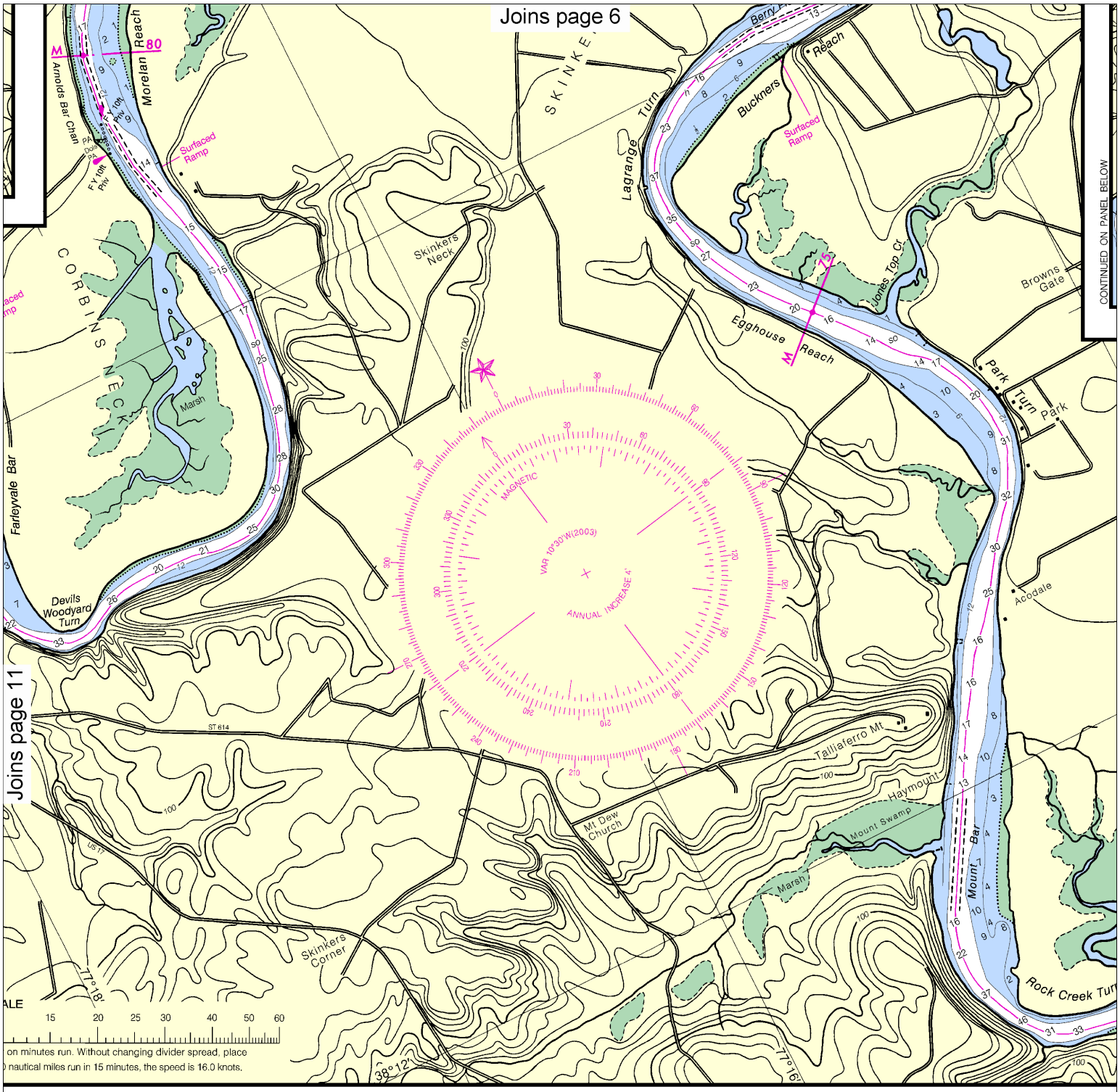
Nautical Miles: 1, ½, 0, 1, 2, 3

Yards: 1000, 0, 1000, 2000, 3000, 4000, 5000

See Note on page 5.



Joins page 17



Note: Chart grid lines are aligned with true north.

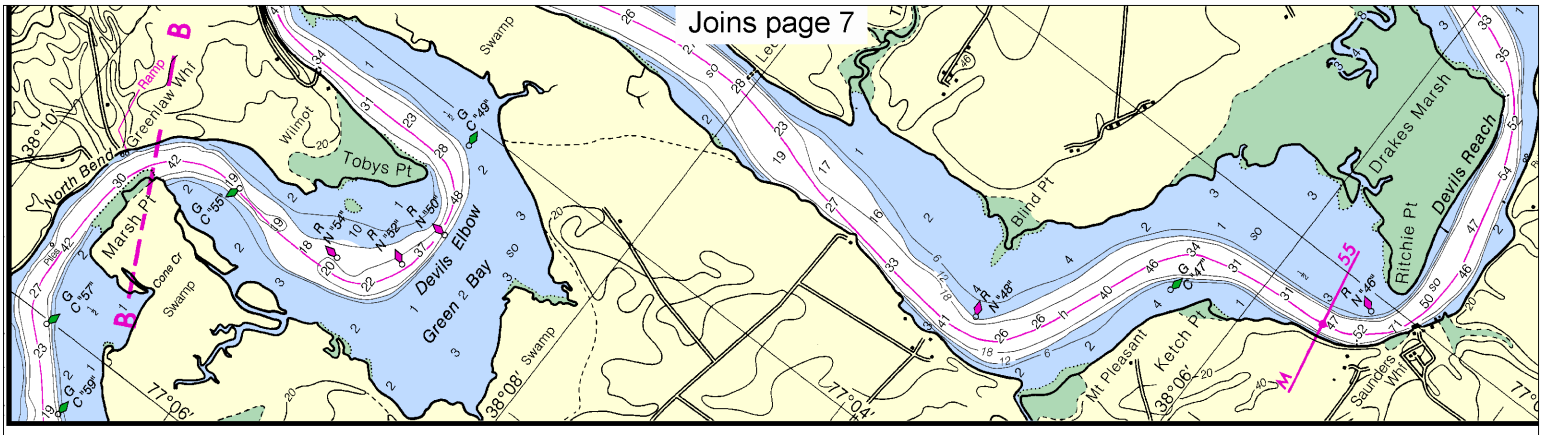
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 7



CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Imagery and Mapping Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:
⊙(Accurate location) o(Approximate location)

RAPPAHANNOCK RIVER

The controlling depth at mean lower low water across the bars between Port Royal Bridge and the Fredericksburg Bar was 10 feet for a width of 100 feet, thence 6 feet to Old City Dock.

Apr - Jun 1977

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

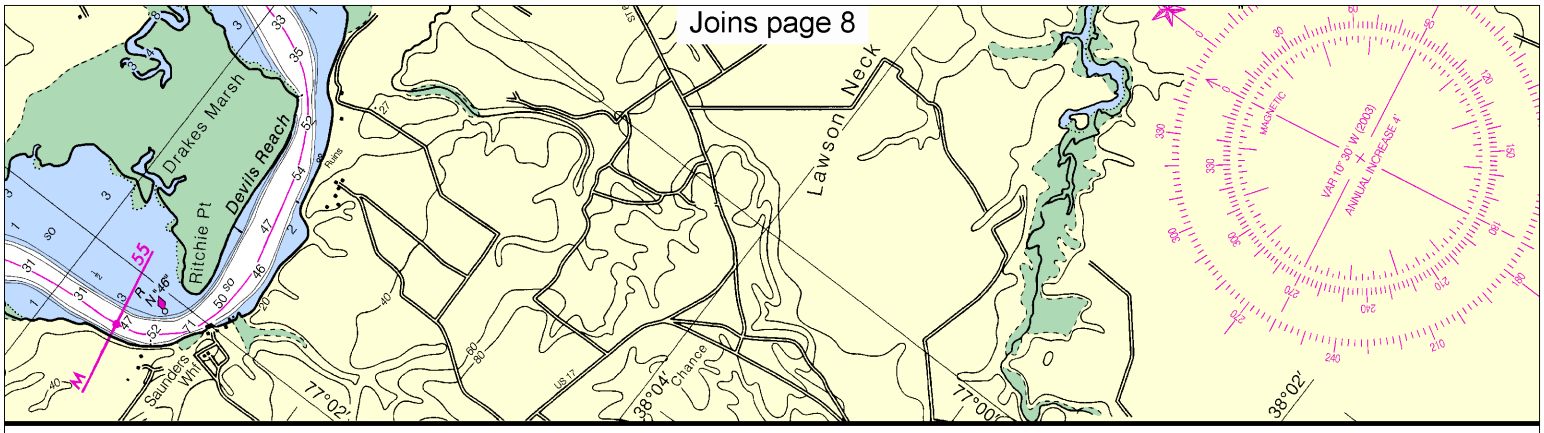
Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

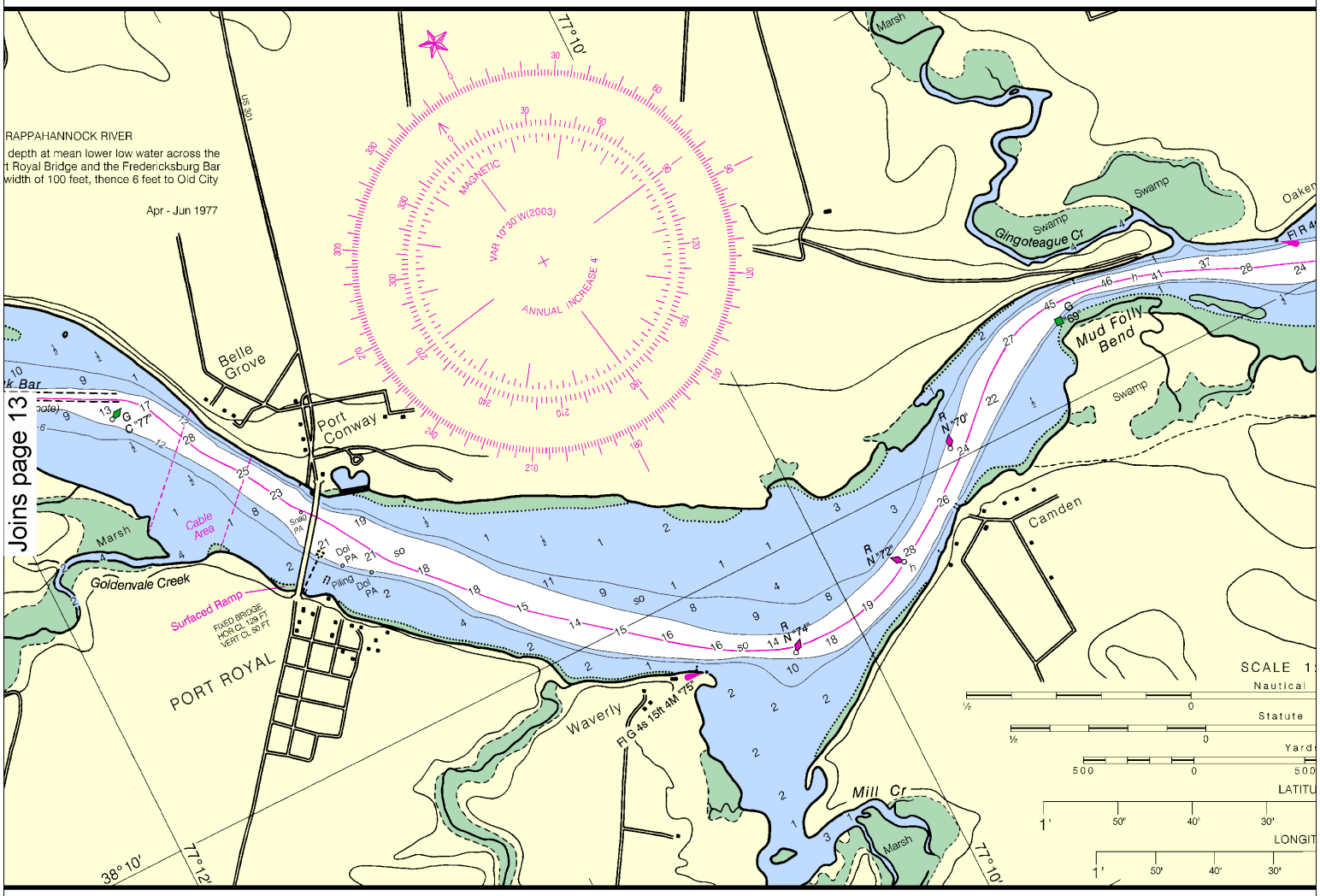
Covered wells may be marked by lighted or unlighted buoys.

Joins page 14

Joins page 19

Joins page 8





Joins page 13

Joins page 20

Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~

Nautical Miles

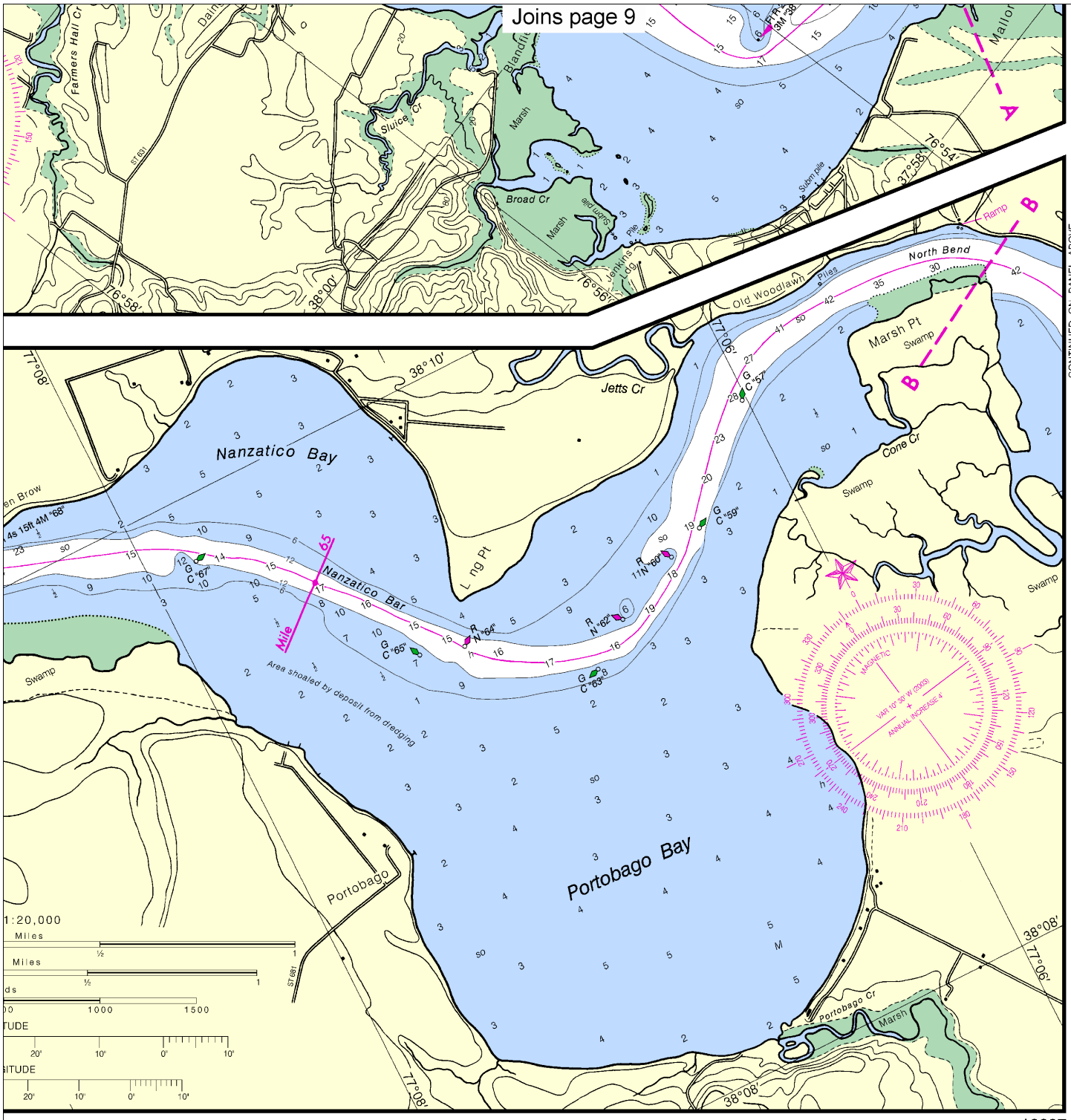
1 ½ 0 1 2 3

Yards

1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 9



CONTINUED ON PANEL ABOVE

SIDE B

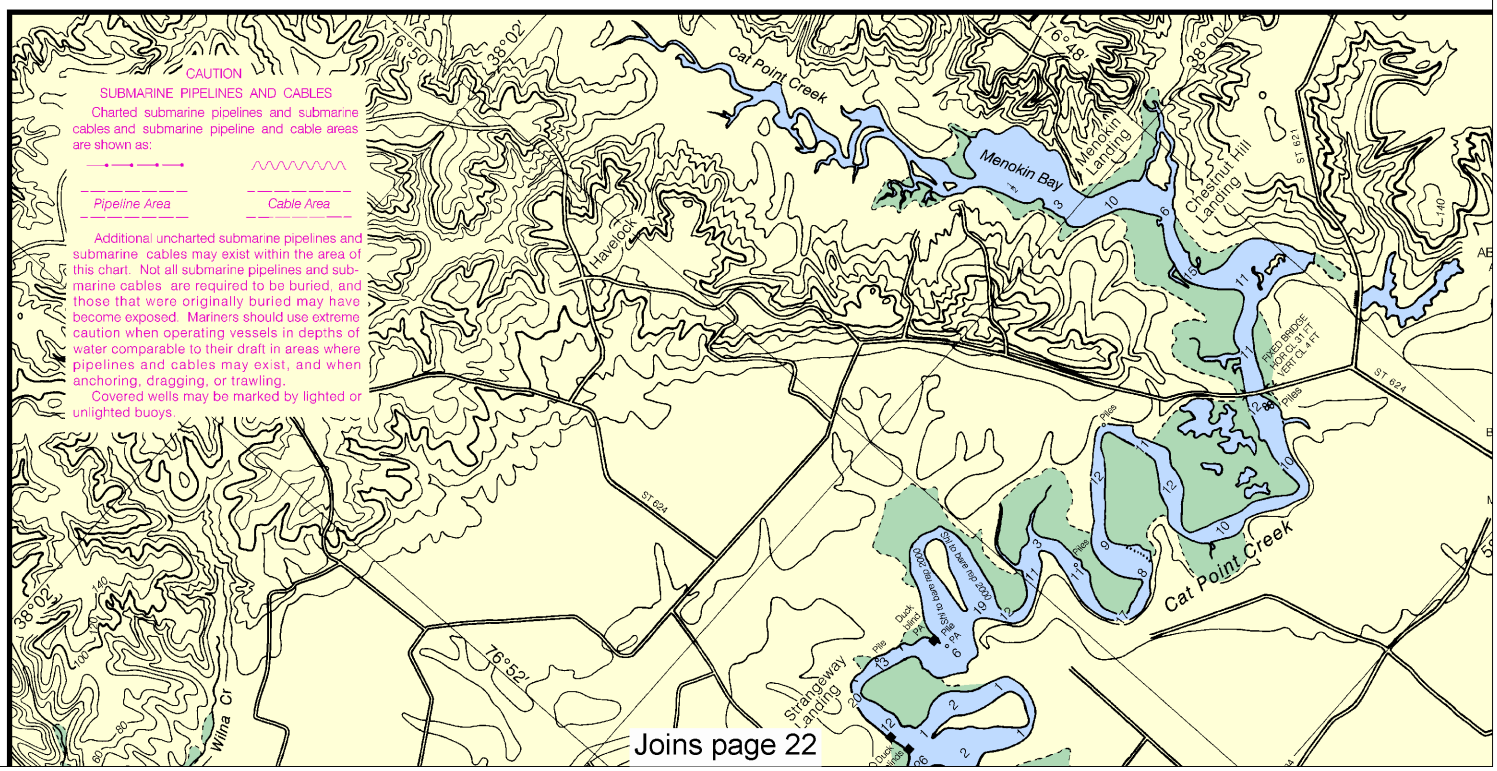
12237

Joins page 21

Joins page 10

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.477" northward and 1.115" eastward to agree with this chart.



Joins page 22

Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.

Joins page 11

LOGARITHMIC SPEED SCALE

1 3 4 5 6 7 8 9 10 15 20 25 30 40

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, plac
right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

Joins page 18

CAUTION

Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Iso Isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Grs grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

FACILITIES

Locations of public marine facilities are shown by large magenta numbers with leaders and refer to the facility tabulation.

Joins page 23

Note: Chart grid lines are aligned with true north.

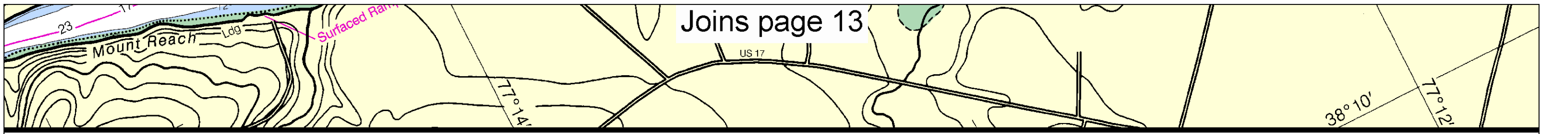
Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

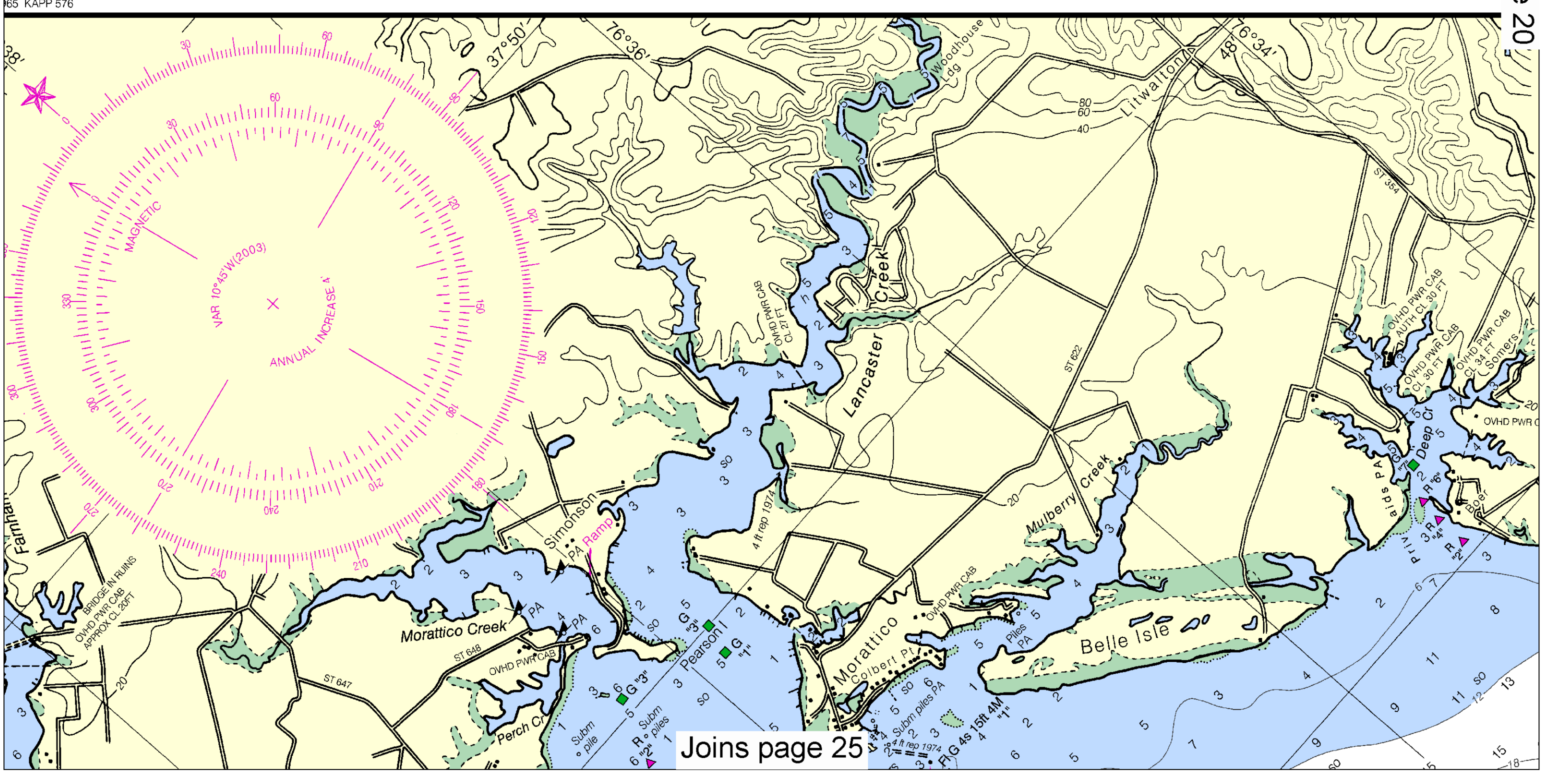
See Note on page 5.

Joins page 13



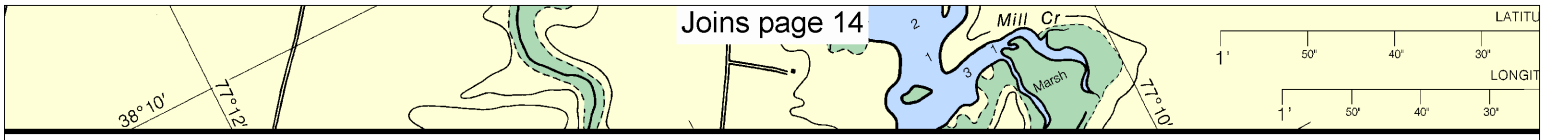
Joins page 20

965 KAPP 576


37°50'
76°36'
76°34'
48'
Woodhouse Ldg
Litwalton
MAGNETIC
VAR 10°45'W(2003)
ANNUAL INCREASE 4'
Lancaster Creek
OVHD PWR CAB CL 27 FT
Mulberry Creek
Simonson
PA Ramp
Morattico Creek
BRIDGE IN RUINS
OVHD PWR CAB APPROX CL 20FT
Farnham
ST 647
ST 648
ST 622
ST 354
OVHD PWR CAB
Perch Cr
Pearson I
Morattico
Colbert Pt
Belle Isle
Subm piles PA
Piles PA
4 ft rep 1974
Deep Cr
Somers
OVHD PWR CAB AUTH CL 30 FT
OVHD PWR CAB CL 36 FT
OVHD PWR CAB CL 34 FT
Subm pile
Subm piles
G 4s 15ft 4M "1"

Joins page 25

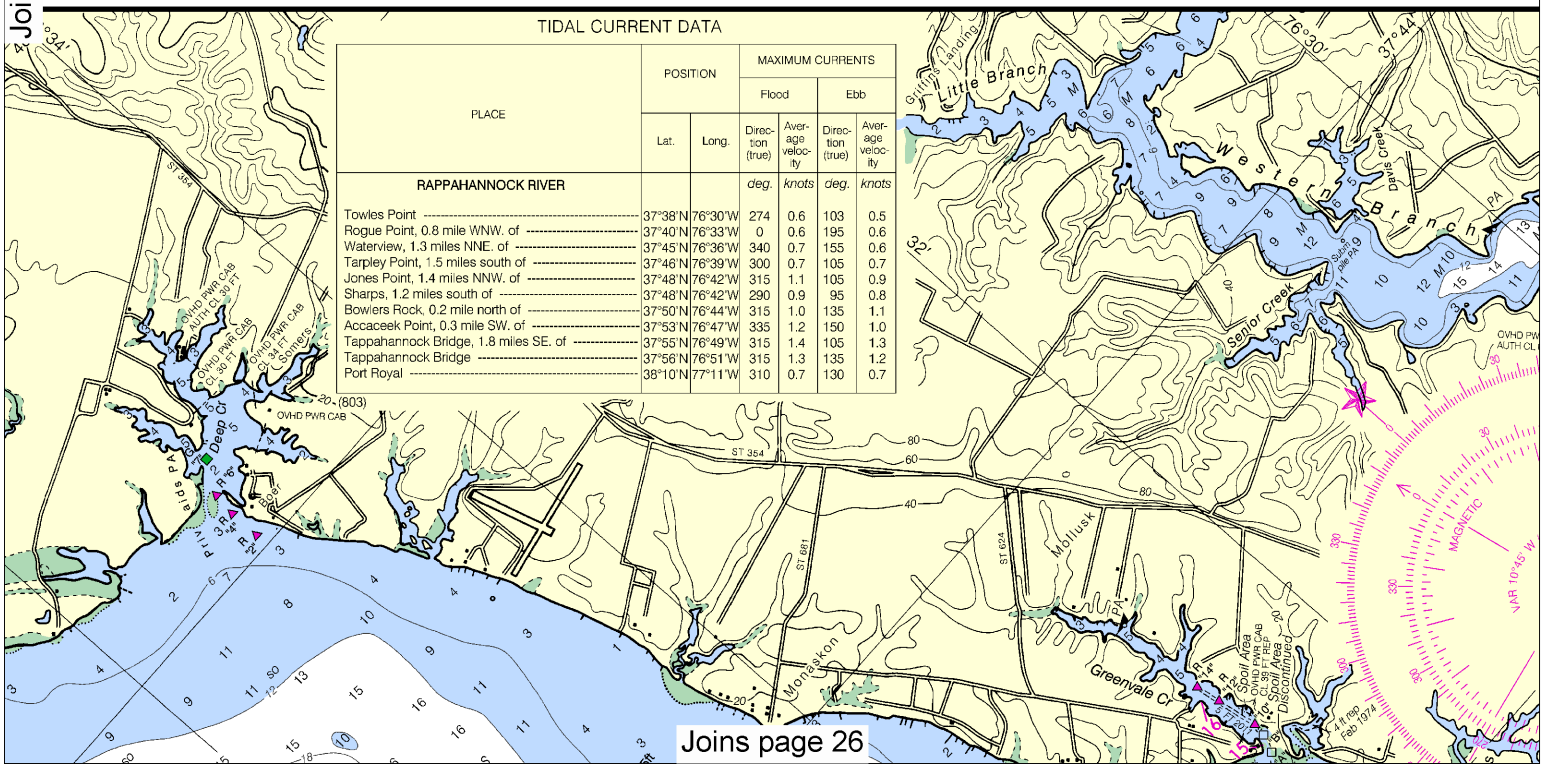
Joins page 14



Joins page 19

TIDAL CURRENT DATA

PLACE	POSITION		MAXIMUM CURRENTS			
			Flood		Ebb	
	Lat.	Long.	Direction (true)	Average velocity	Direction (true)	Average velocity
RAPPAHANNOCK RIVER			*deg.*	*knots*	*deg.*	*knots*
Towles Point	37°38'N	76°30'W	274	0.6	103	0.5
Rogue Point, 0.8 mile WNW. of	37°40'N	76°33'W	0	0.6	195	0.6
Waterview, 1.3 miles NNE. of	37°45'N	76°36'W	340	0.7	155	0.6
Tarpley Point, 1.5 miles south of	37°46'N	76°39'W	300	0.7	105	0.7
Jones Point, 1.4 miles NNW. of	37°48'N	76°42'W	315	1.1	105	0.9
Sharps, 1.2 miles south of	37°48'N	76°42'W	290	0.9	95	0.8
Bowlers Rock, 0.2 mile north of	37°50'N	76°44'W	315	1.0	135	1.1
Accaceek Point, 0.3 mile SW. of	37°53'N	76°47'W	335	1.2	150	1.0
Tappahannock Bridge, 1.8 miles SE. of	37°55'N	76°49'W	315	1.4	105	1.3
Tappahannock Bridge	37°56'N	76°51'W	315	1.3	135	1.2
Port Royal	38°10'N	77°11'W	310	0.7	130	0.7



Joins page 26

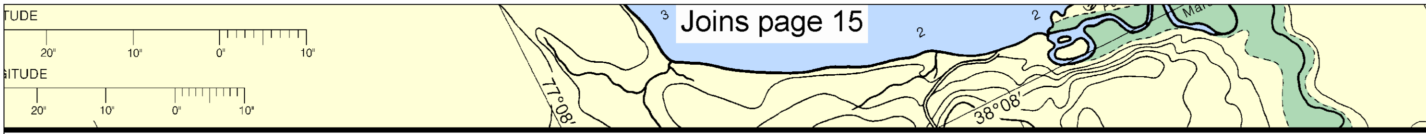
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

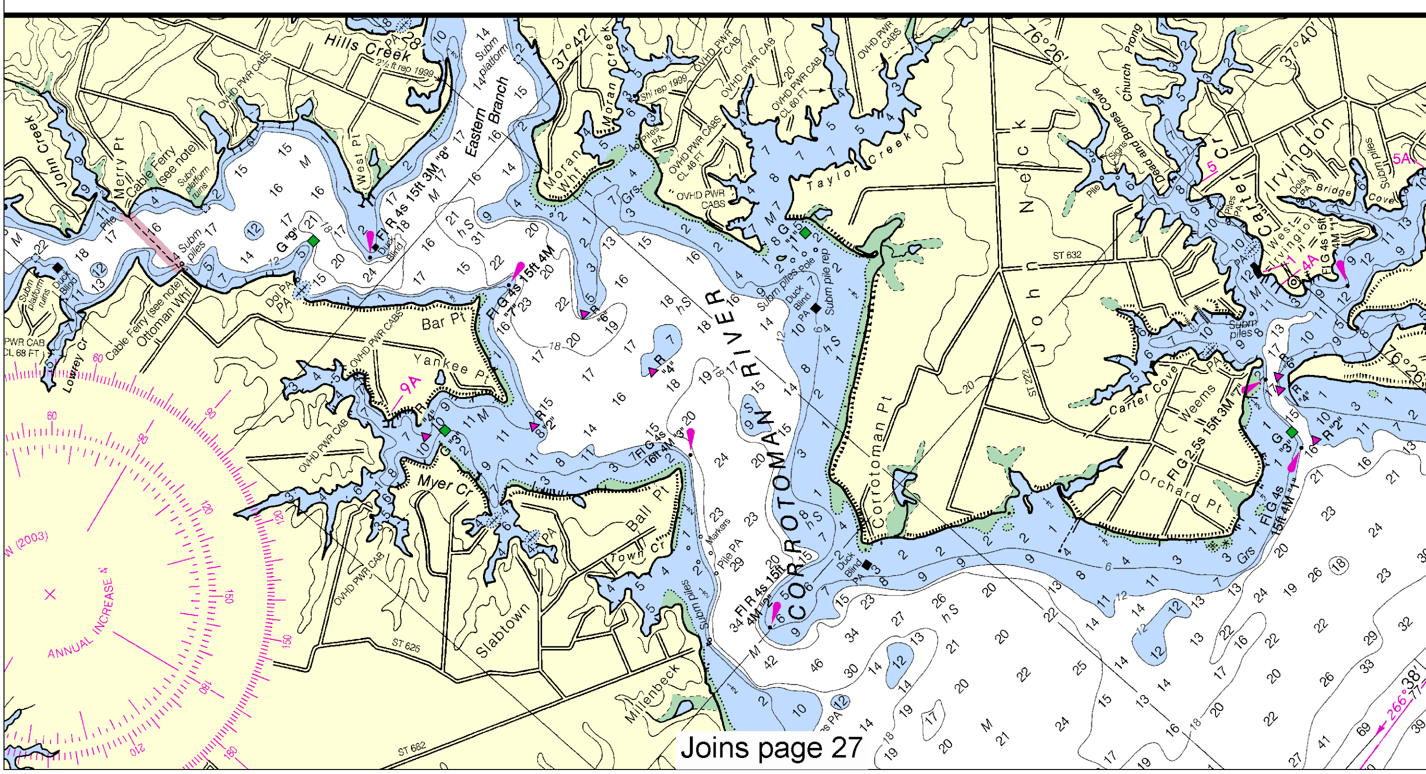
Nautical Miles: 1 ½ 0 1 2 3

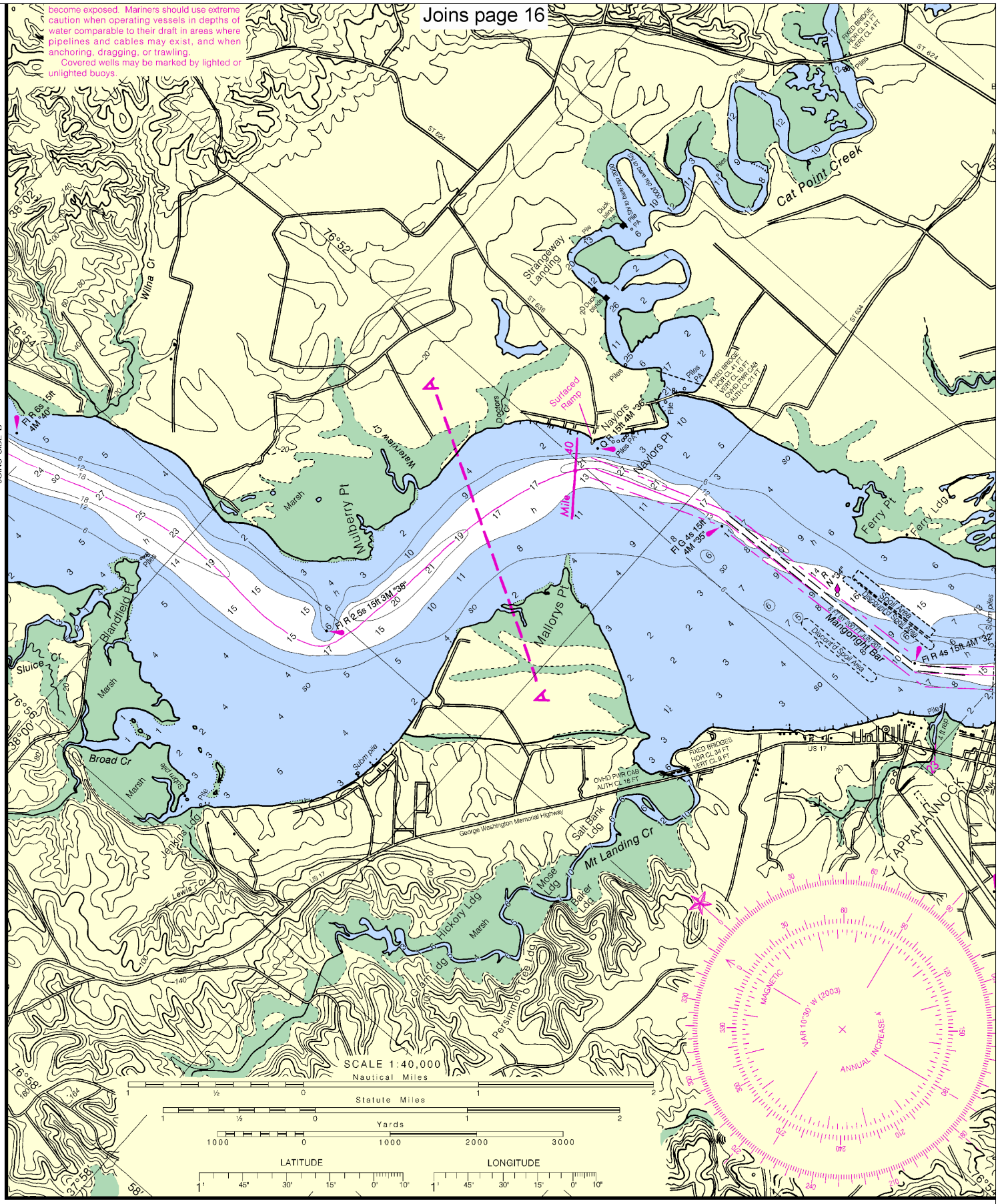
Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 15
77°08'
38°08'

12237


Hills Creek
Eastern Branch
37°42'
Moran Creek
Taylor Creek
76°26'
John Creek
Merry Pt
Cable Ferry (see note)
West Pt
Fl R 4s 15ft 3M "8"
Moran Whf
Bar Pt
Yankee Pt
Fl G 4s 15ft 4M "7"
Ottoman Whf
Lowrey Cr
Myer Cr
Ball Pt
Town Cr
Slabtown
Millenbeck
CORROTOMAN RIVER
Corrotoman Pt
John Neck
Carter Cove
Weems
Orchard Pt
Carter Cr
Irvington
West Irvington
Church Prong
Dead and Bones Cove
37°40'
ST 632
ST 625
ST 682
ANNUAL INCREASE
JOINS CHART 12235
Joins page 27

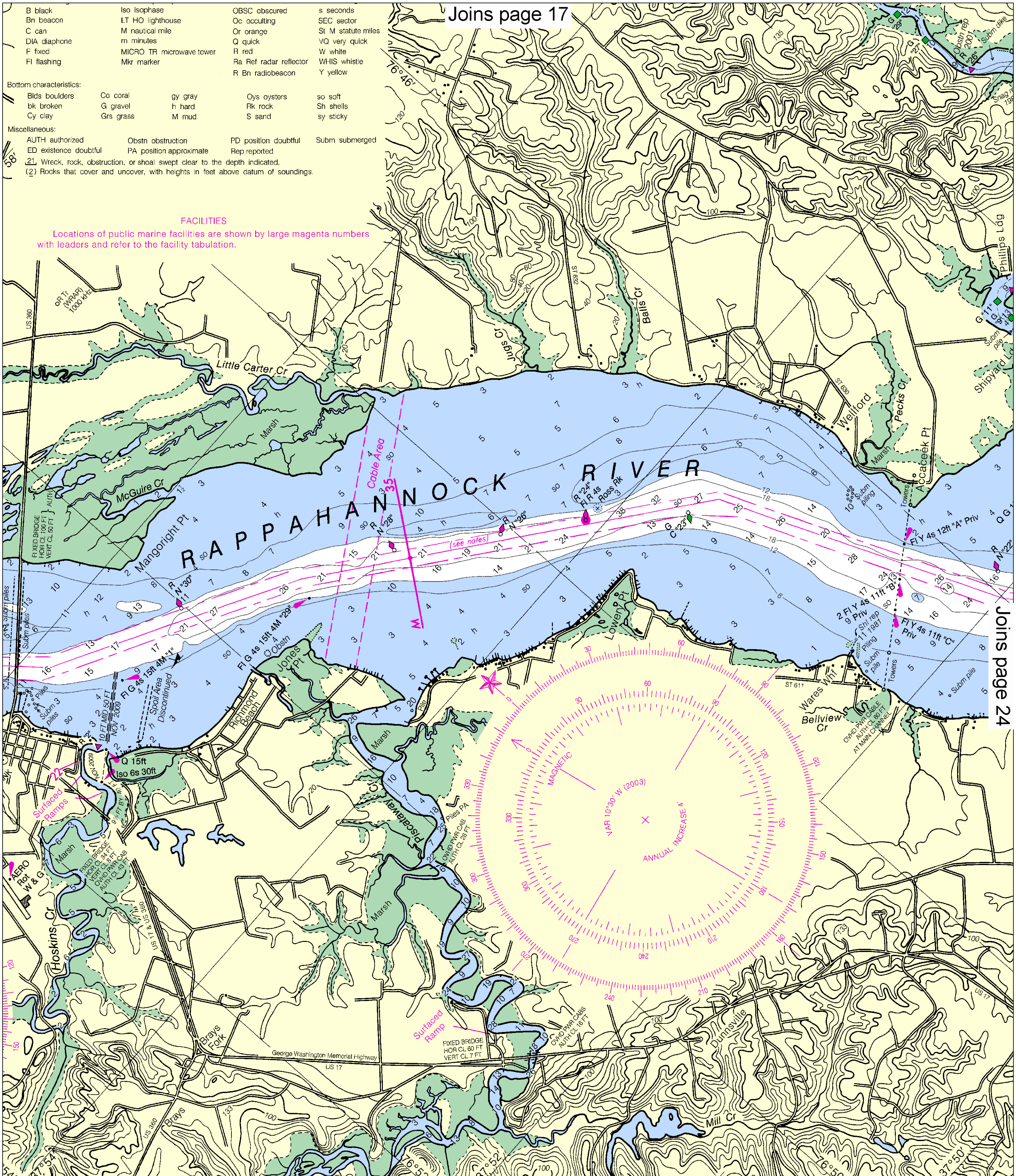


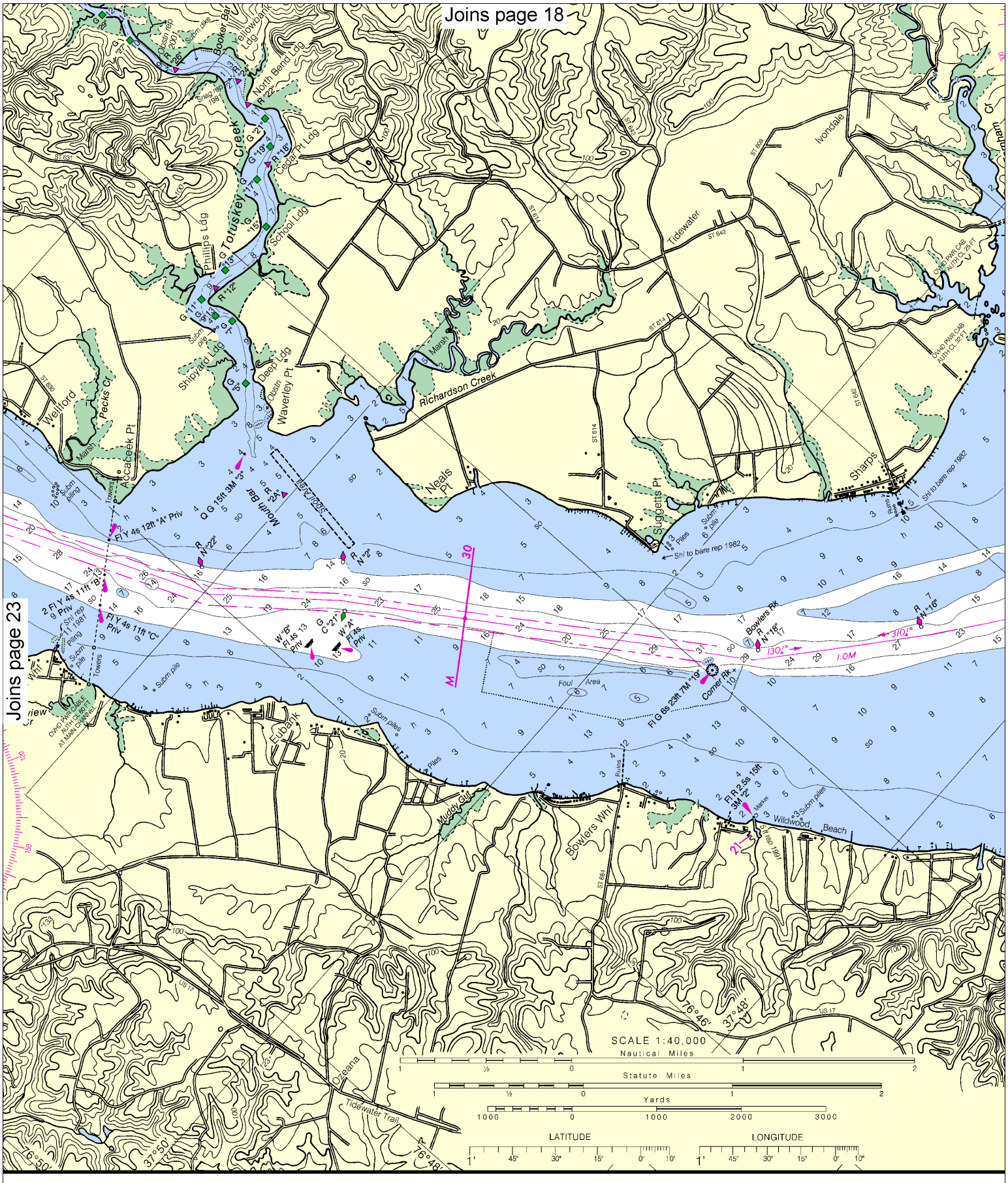
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~
Nautical Miles
1 ½ 0 1 2 3
Yards
1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 17
Joins page 24
B black
Bn beacon
C can
DIA diaphone
F fixed
Fl flashing
Iso isophase
LT HO lighthouse
M nautical mile
m minutes
MICRO TR microwave tower
Mkr marker
OBSC obscured
Oc occulting
Or orange
Q quick
R red
Ra Ref radar reflector
R Bn radiobeacon
s seconds
SEC sector
St M statute miles
VQ very quick
W white
WHIS whistle
Y yellow
Bottom characteristics:
Blds boulders
bk broken
Cy clay
Co coral
G gravel
Grs grass
gy gray
h hard
M mud
Oys oysters
Rk rock
S sand
so soft
Sh shells
sy sticky
Miscellaneous:
AUTH authorized
ED existence doubtful
Obstn obstruction
PA position approximate
PD position doubtful
Rep reported
Subm submerged
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
FACILITIES
Locations of public marine facilities are shown by large magenta numbers with leaders and refer to the facility tabulation.
RAPPAHANNOCK RIVER
Little Carter Cr
McGuire Cr
Mangoright Pt
Jigs Cr
Balls Cr
Wellford
Pecks Cr
Accaceek Pt
Phillips Ldg
Shipyard Ldg
Ross Rk
Cable Area
Jones Pt
Richmond Beach
Lowery Pt
Wares Whf
Bellview Cr
Piscataway Cr
Hoskins Cr
Brays Fork
Brays
Dunnsville
Mill Cr
Spoil Area Discontinued
Surfaced Ramps
Surfaced Ramp
FIXED BRIDGE HOR CL 100 FT VERT CL 50 FT
FIXED BRIDGE HOR CL 60 FT VERT CL 7 FT
OVHD PWR CABLE AUTH CL 90 FT AT MAIN CHANNEL
George Washington Memorial Highway
US 17
US 360
VAR 10°30'W (2003)
ANNUAL INCREASE 4'
MAGNETIC
Fl G 4s 15ft 4M "29"
Fl G 4s 15ft 4M "1"
Fl R 4s
Fl Y 4s 12ft "A" Priv
2 Fl Y 4s 11ft "B" 9 Priv
Fl Y 4s 11ft "C" Priv
Q 15ft
Iso 6s 30ft
AERO Rot W & G
(see notes)
76°46'
76°52'
37°52'
37°50'
37°54'

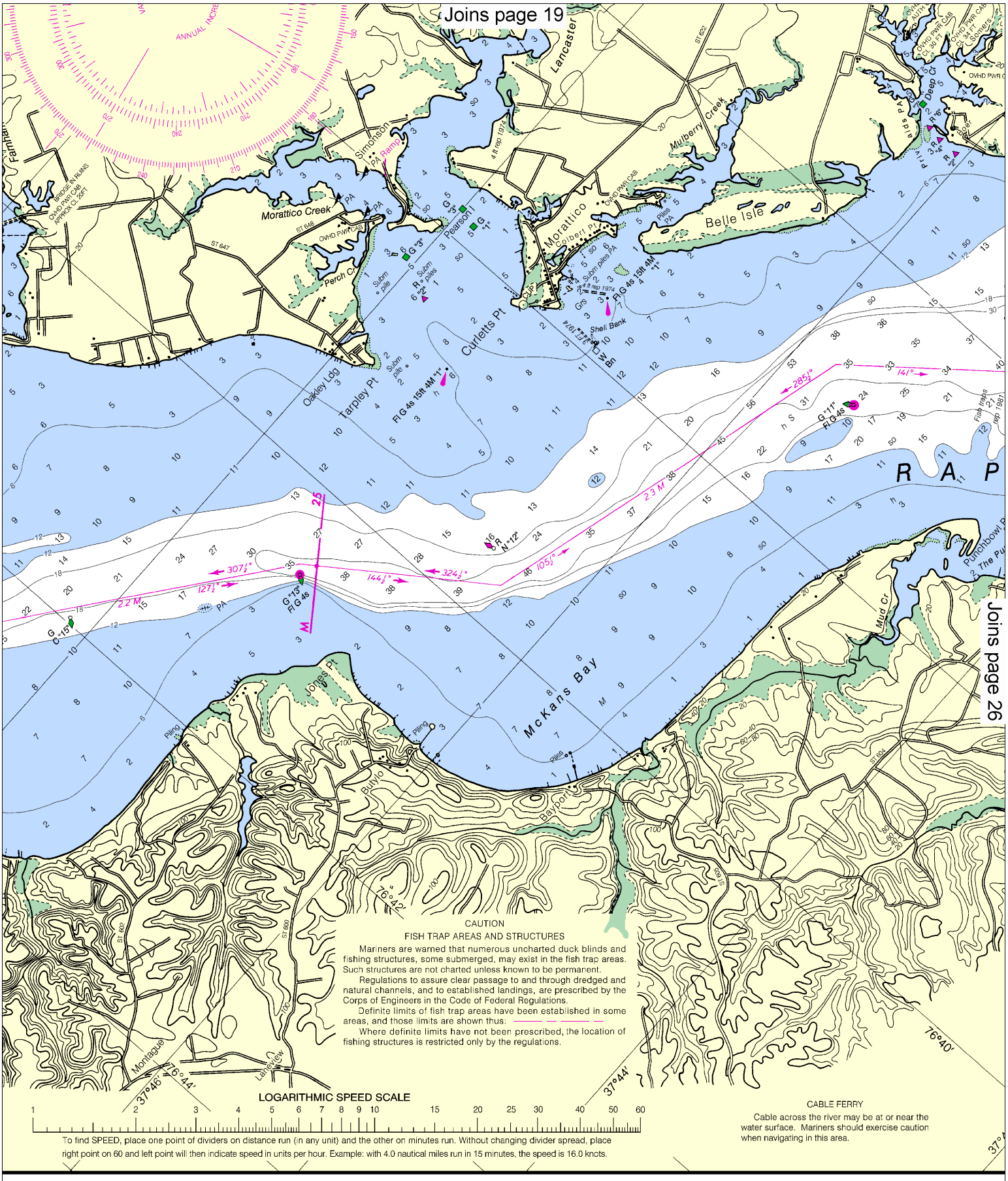


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

~~SCALE 1:40,000~~
Nautical Miles
Yards

See Note on page 5.



CAUTION

FISH TRAP AREAS AND STRUCTURES

Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.

Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.

Definite limits of fish trap areas have been established in some areas, and those limits are shown thus: — — — — —

Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

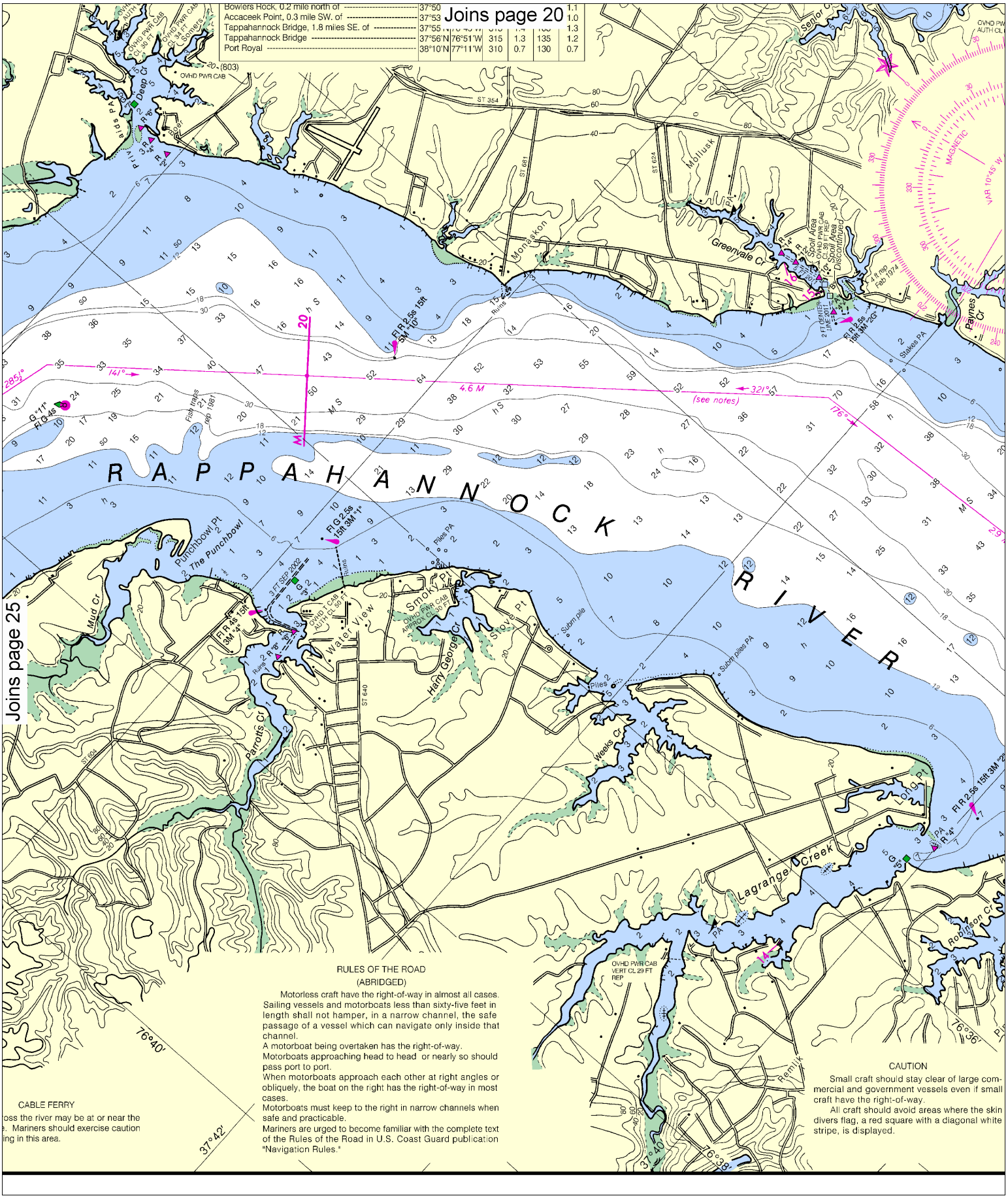
LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

CABLE FERRY

Cable across the river may be at or near the water surface. Mariners should exercise caution when navigating in this area.



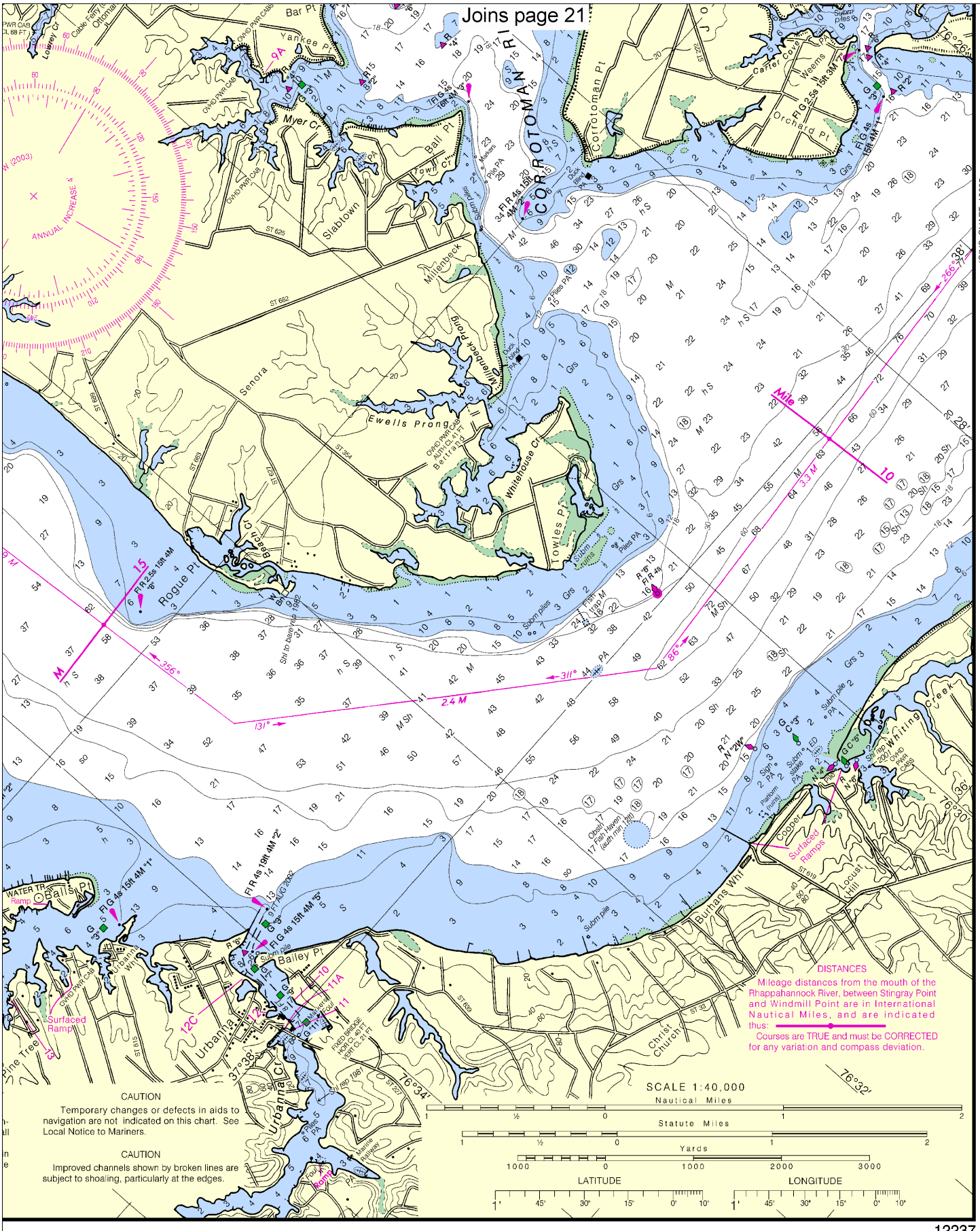
Note: Chart grid lines are aligned with true north.

Printed at reduced scale. ~~SCALE 1:40,000~~

Nautical Miles: 1 ½ 0 1 2 3

Yards: 1000 0 1000 2000 3000 4000 5000

See Note on page 5.


Joins page 21
CORROTOMAN R
Bar Pt
Yankee Pt
Myer Cr
Ball Pt
Town Cr
Slabtown
Millenbeck
Millenbeck Prong
Senora
Ewells Prong
Whitehouse Cr
Towles Pt
Corrotoman Pt
Carter Cove
Weems
Orchard Pt
Rogue Pt
Beach Cr
Bailey Pt
Urbanna Cr
Urbanna
Burhams Wht
Whiting Creek
Locust Hill
Christ Church
Pine Tree
Ball's Pt
WATER TR
Ramp
Surfaced Ramp
Mile 10
9 M
2.4 M
3.3 M
356°
131°
311°
266°
086°
CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
CAUTION
Improved channels shown by broken lines are subject to shoaling, particularly at the edges.
DISTANCES
Mileage distances from the mouth of the Rhappahannock River, between Stingray Point and Windmill Point are in International Nautical Miles, and are indicated thus:
Courses are TRUE and must be CORRECTED for any variation and compass deviation.
SCALE 1:40,000
Nautical Miles
Statute Miles
Yards
LATITUDE
LONGITUDE
37°38'
76°34'
76°32'
JOINS CHART 12235
SIDE A
12237

EMERGENCY INFORMATION

VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.
Channel 9 – Communications between boats and ship-to-coast.
Channel 13 – Navigation purposes at bridges, locks, and harbors.
Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.
Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.
Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

All Hazards NOAA Weather Radio NOAA's National Weather Service

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.
http://www.nws.noaa.gov/nwr/

Quick References

Nautical chart related products and information	—	**http://www.nauticalcharts.noaa.gov**
Online chart viewer	—	**http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html**
Report a chart discrepancy	—	**http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx**
Chart and chart related inquiries and comments	—	**http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs**
Chart updates (LNM and NM corrections)	—	**http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html**
Coast Pilot online	—	**http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm**
Tides and Currents	—	**http://tidesandcurrents.noaa.gov**
Marine Forecasts	—	**http://www.nws.noaa.gov/om/marine/home.htm**
National Data Buoy Center	—	**http://www.ndbc.noaa.gov/**
NowCoast web portal for coastal conditions	—	**http://www.nowcoast.noaa.gov/**
National Weather Service	—	**http://www.weather.gov/**
National Hurrican Center	—	**http://www.nhc.noaa.gov/**
Pacific Tsunami Warning Center	—	**http://ptwc.weather.gov/**
Contact Us	—	**http://www.nauticalcharts.noaa.gov/staff/contact.htm**

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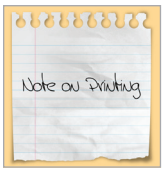

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